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ABSTRACT

This working paper reviews World Bank project experience in gender issues within higher education over the last two decades. The study's objectives were to: (1) assess the attention given by the Bank has given to gender issues in postsecondary education; (2) examine policies to increase women's access to postsecondary education; and (3) identifying promising approaches to reducing the gender gap in higher education. Two major conclusions are reported: First, the most essential factor for successful intervention is a strong demand for educated women in the labor market combined with a high private demand for higher education by women (and their parents) and, second, the link between programs offered and labor market demands is critical. Additionally, projects with only a single intervention were successful only in societies where the formal labor market is growing and there are few social constraints or qualifications to inhibit women's participation. Projects with single interventions were less likely to succeed in the presence of such pervasive social factors as low secondary enrollment rates for women, high direct costs for female education, and heavy cultural restrictions in the labor market. Recent Bank projects have been substantially more likely to address gender inequities and provide multiple, interrelated interventions. Appendices detail activities, results, and constraints of the Bank's higher education projects. (Contains 10 references.) (GLR)

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Women in Development

Education and Social Policy Department
The World Bank
February 1993
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Improving Women's Access to Higher Education

A Review of World Bank Project Experience

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Halil Dundar
and
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Projects to increase female participation in higher education are most likely to succeed where there is a strong demand for educated women in the labor market, combined with a high private demand for higher education by women (and their parents).

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WPS 1106

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World Bank project experience on what works to improve women's access to tertiary education is so limited that it may be premature to draw firm conclusions. Many of the projects with interesting multiple interventions are ongoing. But two conclusions emerge.

First, the most essential factor for successful intervention seems to be a strong demand for educated women in the labor market combined with a high private demand for higher education by women (and their parents). How well a project succeeds depends on the extent to which project components are sensitive to the local situation in terms of these factors.

Projects with often only a single intervention were successful in societies where the formal labor market is growing and there are few social constraints or qualifications to inhibit women's participation. Projects with single interventions are unlikely to succeed with such pervasive social factors as low secondary enrollment rates for women, high direct costs for female education, and heavy cultural restrictions in the labor market.

Second, the link between programs offered and labor market demands is critical. High secondary enrollment rates, heavy private demand for women's education, and the availability of student places do not necessarily guarantee an increase in women's participation in higher education — unless the programs are dovetailed to meet the specific demands of the labor market. It is not enough to overcome social barriers through policy interventions. Projects must take an integrated view of social and labor market constraints.

The Bank seems to be moving in a positive direction as more projects are addressing and taking action against gender inequities today than they did in the 1970s. Of the projects introducing gender-specific interventions, 62 percent were developed in the past five years (1987-92). Some recent Bank projects have multiple, interrelated interventions.

Initial project results indicate that this combined ("package") approach, made country-specific, could well increase female participation in higher education.

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IMPROVING WOMEN'S ACCESS TO HIGHER EDUCATION:

A REVIEW OF WORLD BANK PROJECT EXPERIENCE

by
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IMPROVING WOMEN'S ACCESS TO HIGHER EDUCATION: A REVIEW OF WORLD BANK PROJECT EXPERIENCE

Introduction

Although higher educational institutions have expanded in developing countries, participation rates for females at the post-secondary level continue to be considerably lower than for males. Clearly, gender parity in enrollments in higher education has not received as much attention as expansion of places. The disparity is most strongly evident in Sub-Sahara Africa and South Asia. Even where gender parity may have been achieved, gender-streaming of disciplines persists, with women mostly concentrated in traditional fields.

Education of women is important not only from the angle of equal education opportunity between the sexes, but also for the substantial social and economic returns to female education that can be achieved by raising women's productivity and income level, producing better educated and healthier children, and reducing fertility rates (Schultz 1989; Herz et al. 1991; Subbarao and Raney 1992; Summers 1992). Investments in higher education, particularly in developing countries, have high private rates of return measured by associated wage increases reflecting the existence of productive opportunities in the labor market. Wide gender disparity suggests prima facie that a large number of potential candidates are denied the opportunity to participate actively in productive activities and contribute to faster economic development.

The World Bank began lending for education in 1963. The shift in Bank[1] investment precipitated from changes in economic thought in the early 1960s when education came to be seen as a critical investment in human capital, essential to the development process. The objectives of many early education projects were to build infrastructures such as schools and to develop educational planning capacity. Since the early 1980s, the Bank projects have introduced policy reforms affecting the expansion, financing and internal efficiency especially of higher

[1] The word "Bank" used in this paper refers to the World Bank.

education systems. The reforms were designed to reduce uncontrolled growth of higher education expenditures by capping university intake, limiting grants and subsidies to students, introducing student fees, and rationalizing academic programs and staffing (Eisemon, 1992).

Despite the persistence of gender disparity in higher education in most developing countries, Bank projects between 1970-1985 rarely mentioned gender disparity as an issue or introduced significant policies to overcome it. More significantly, there was no coherent Bank policy regarding women's access to education in general and to higher education in particular.

Since the mid-1980s, however, the Bank projects have increasingly paid attention to gender issues in higher education projects, notwithstanding the lack of a coherent policy regarding women's access to higher education. The purpose of this paper is to review Bank project experience in higher education over the last two decades and answer the question: How have gender issues been treated in the Bank projects for higher education? The specific objectives of the study are to: (a) assess how much attention the Bank has given to gender issues in post-secondary education; (b) examine what (if any) policies have been explicitly tried to increase women's access; (c) identify, on the basis of project experience, promising approaches to reduce the gender gap in higher education; and d) make recommendations for the treatment of gender issues in future higher education projects.

The analysis focuses especially on policies and project components which have been effective in increasing women's opportunities in higher education and draws lessons for the future. The first section reviews the methodology and data sources used for the study. Section 2 examines trends the Bank's lending to higher education projects by regions and over time (1972-1981 and 1982-1992) from a gender perspective. In section 3, we analyze the constraints and interventions by region. Section 4 provides an analysis of projects with specific interventions to increase female enrollment. In the final section, promising approaches and lessons learned are examined with the hope of improving women's access to higher education for future higher education projects.

I. METHODOLOGY AND DATA

A. Methodology

In this study, we cover all Bank education projects with higher education components from 1972-1992, including formal and non-formal programs leading to a degree, certificate or diploma. The study also covers teacher training projects for which secondary degrees are pre-requisites for admittance.

In examining Bank education projects with higher education components, we classified them according to their sensitivity to gender disparity in enrollment rates at the tertiary level and the degree to which the projects introduce specific policy interventions to improve women's access to higher education. Thus, there are two main categories. The first category includes projects which at the minimum recognized gender as an issue through qualitative analysis of women's participation in post-secondary education and/or identified the constraints associated with low levels of enrollment. These are considered as projects which "acknowledge gender". The second includes projects which go beyond merely recognizing gender as an issue and introduce specific interventions to increase female participation and/or access to higher education. The central focus of the paper is on this second category of projects that contained specific policy interventions aimed at promoting greater gender parity. These projects are analyzed separately and in depth.

B. Data

Primary resources for this study were World Bank Staff Appraisal Reports (SARs) for higher education projects between 1972 and 1992. For the purpose of analysis, we focused on education projects for which higher education comprised 25% or more of the total project cost. These also included education sector projects and teacher training projects.

For assessing possible shifts in the Bank's approach to gender equity in higher education

over time, we analyzed two time periods: 1972-1981 and 1982-1992. The expectation is that the Bank may have paid greater attention to gender equity in projects in the more recent period.

Further material was extracted from Project Completion Reports (PCRs) and the Project Performance Audit Reports (PARs) and served as an evaluative tool for assessing project success in attaining the gender objectives stated in the SARs. To analyze the preliminary results of recent on-going projects with gender specific interventions, we interviewed project staff for selected countries.

Limitations of the Study

Notwithstanding the comprehensive coverage, the study has certain limitations in the selection and evaluation of projects. First, the study is limited only to the Bank's experience from 253 education projects with higher education components between 1972-1992. As such, it does not capture non-Bank project experience.

Second, limited gender awareness does not necessarily indicate a significant gender parity problem. For instance, in the Philippines, near parity in higher education enrollment exists. Not surprisingly, projects in the Philippines do not refer to the existence of a gender problem.[2] On the other hand, in the Gambia, where gender disparity at the tertiary level is great, failure to recognize the inequity would indicate low gender-sensitivity in the Bank-assisted higher education projects.

Analyzing individual projects without understanding the government's overall plan for post-secondary education is not entirely satisfactory. In countries where primary enrollment rates remain excessively low, policies may focus on increasing access to and expansion of basic education, with less regard to gender parity in higher education. With these caveats, lets us examine the trends in Bank lending to higher education.

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[2] However, even in these countries, women may be opting for low-paying, traditional fields of study. This issue of gender streaming could not be effectively addressed in this paper owing to insufficient data base.

II. TRENDS IN THE BANK'S LENDING TO HIGHER EDUCATION

Overview: Overall, the Bank approved 122 higher education projects between 1972-1981 and 131 projects between 1982-1992 in Africa, East and South Asia, EMENA and Latin America/Caribbean. Of the 122 projects identified between 1972-1981, 32 (or 26% of total projects) acknowledged gender as an issue and 13 (or 11% of the total projects) introduced significant interventions to overcome gender disparity. The number as well as the proportion of projects addressing gender significantly increased during 1982-1992. Fifty-three (or 41% of the total higher education projects) recognized gender as an issue while 36 (28%) introduced specific interventions.

Resources for Gender Specific Interventions: Ideally, to determine the most cost-effective approaches to increasing gender equity in higher education, one would have to examine the costs associated with each gender-specific intervention. This was not possible, given the paucity of disaggregated data from project SARs. We can, however, estimate the amount invested in projects with gender components as a part of total higher education investment. Examination of the total investment allocated to specific projects may illustrate the relative weight placed on projects addressing gender equity within the context of higher education projects. Table 1 below compares the distribution of total number and costs of Bank-assisted higher education projects by region for 1972-1981 and 1982-1992.

A. 1972-1981: The total cost of higher education projects approved between 1972 and 1981 was US $4.2 billion.[3] Interestingly, only 24% ($1 billion) of the total investments in higher education funded projects which acknowledged gender as an issue. Further, only 41% of the funding for projects acknowledging gender as an issue was allocated to projects with gender-specific policies ($420 million or 10% of <u>total</u> higher education investments). These figures suggest that projects acknowledging gender disparity did not receive primary attention from the Bank during the 1970s.

---

[3] All figures are expressed in 1985 dollars.

Table 1. Review of Bank-Assisted Higher Education Projects

	1972 - 1981*						1982 - 1992*					
	Africa	S Asia	E Asia	EMENA	LAC	Total	Africa	S Asia	E Asia	EMENA	LAC	Total
1 All Education Projects	62	11	36	35	30	174	71	23	58	40	37	229
2 Education Projects with higher education components (including teacher training)												
(a) Number of projects	46	6	23	28	19	122	35	13	41	29	13	131
(b) Total investment (Millions of US$)**	363 4	194 9	2282 7	1300 4	65 8	4207 2	417 2	623 6	5102 2	1027 1	622 0	7792 1
3 Those acknowledging gender issues												
(a) Number of projects	9	3	4	13	3	32	9	8	20	10	6	53
(b) Total investment (Millions of US$)**	162 9	83 6	77 5	669 4	29 8	1023 4	198 6	530 9	2310 1	419 7	84 3	3543 6
4 Projects with significant action to address gender problem***												
(a) Number of projects	4	2	1	4	2	13	5	6	14	8	3	36
(b) Total investment (Millions of US$)**	113 2	71 8	7 8	205 2	21 8	419 9	112 3	520 3	1832 5	321 0	15 8	2800 9
5 (a) Row 3 as a % of row 2												
(i) Number of projects	19 6%	50 0%	17 4%	46 4%	15 8%	26 2%	25 7%	61 5%	48 7%	34 5%	46 2%	40 5%
(ii)Total investment (Millions of US$)**	44 9%	42 9%	3 4%	51 5%	45 3%	24 3%	47 6%	85 1%	45 3%	40 9%	13 6%	45 5%
(b) Row 4 as a % of row 2												
(i) Number of projects	8 7%	33 3%	4 3%	14 3%	10 5%	10 6%	14 3%	46 1%	34 1%	27 6%	23 1%	27 5%
(ii)Total investment (Millions of US$)**	31 2%	36 8%	0 3%	15 8%	33 1%	9 9%	26 9%	83 4%	35 9%	31 3%	2 5%	35 9%

Source: World Bank documents.

Notes: *"cut-off" date May 31, 1992; **Expressed in 1985 dollars. *** Inclusive of monitoring, needs assessment and other goverment invterventions.

B. 1982-1992: During the 1980s however, the situation improved with respect to addressing gender issues in higher education projects. While the total investment in Bank-assisted higher education projects was $7.8 billion, investment in projects acknowledging gender as an issue constituted 46% of the total costs for all higher education projects. The investment in projects introducing gender specific policies was 36% of total higher education investment (up from 10% in the 1970s).

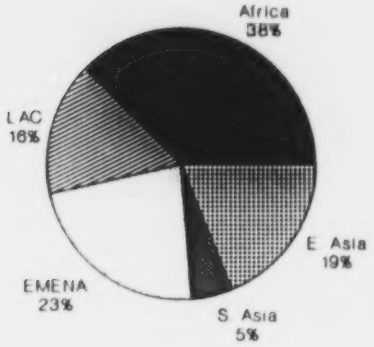
C. Regional Distribution:

a) All higher education projects: The distribution of education projects with higher education components reveals significant regional shifts in Bank lending strategies over time. Between 1972-1981, Africa accounted for the largest regional share or 38% of 122 higher education projects. Despite an increase in the total number of higher education projects from 1972-1981 to 1982-1992, Africa's share decreased during the later period to 27%. Much of the increase in total projects in the 1980s can be attributed to an increase in the number of projects allocated to E.Asia from 23 (1972-1981) to 41 (1982-1992) (see Figures 1a and 1b).

With regard to total investment in higher education projects for both decades, the percent invested was highly skewed in favor of E.Asia (54% during the 1970s and 65% during the 1980s). It is interesting to note that while Africa had a higher number of projects between 1972-1981, E.Asia had a higher share of investment (Africa, 9%; E.Asia, 54%). This trend continued in the 1980s. Whereas both E.Asia and Africa had large numbers of higher education projects between 1982-1992, only 5% of total investment in higher education during that period was in Africa while E.Asia received 65%.

b) Projects acknowledging gender: The largest number of higher education projects acknowledging gender as an issue during the 1970s was in the EMENA region (41%). Gender-acknowledging projects in EMENA were comparatively well funded, receiving 65% of higher education investment during that period. EMENA was followed by Africa in both instances (see Figures 2a and 2b).

Figure 1a: Education Projects
w/Higher Education 1972-1981



Total Investment in Higher Education
1972-1981

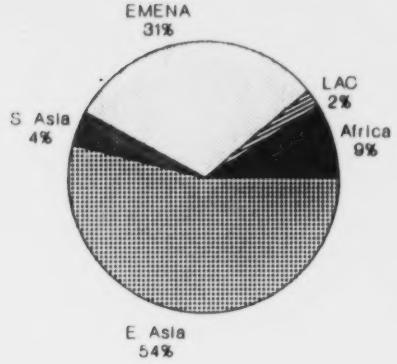
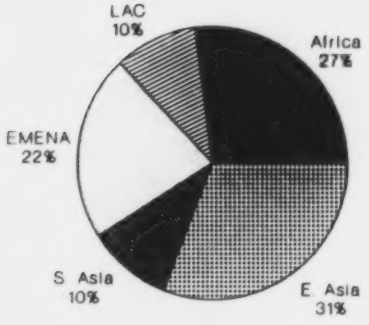
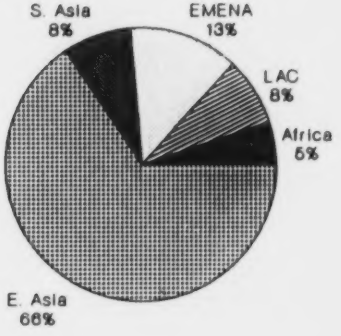


Figure 1b: Education Projects
w/Higher Education 1982-1992

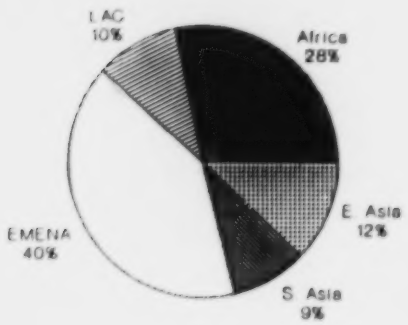


Total Investment in Higher Education
1982-1992



Source: Calculated from Table 1.

Figure 2a: Ed. Projects Acknowledging Gender 1972-1981



Total Investment in Ed Projects Acknowledging Gender 1972-1981

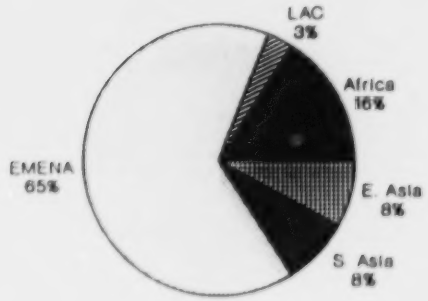
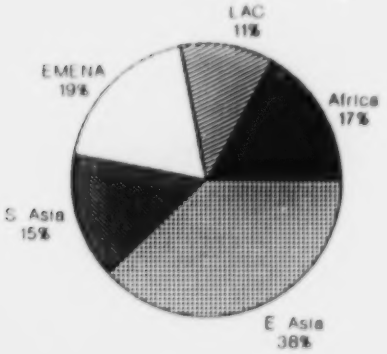
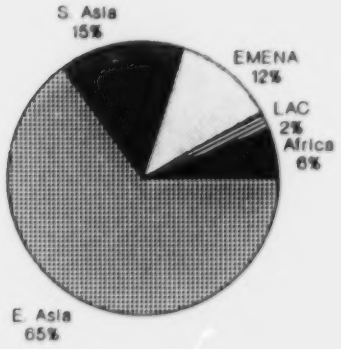


Figure 2b: Ed Projects Acknowledging Gender 1982-1992



Total Investment in Ed Projects Acknowledging Gender 1982-1992



Source: Calculated from Table 1.

However, there was a substantial regional shift during the 1980s away from the EMENA and Africa regions to the Asian regions in the numbers and investment in projects acknowledging gender. The number of projects in E.Asia increased from 12% to 38%; the percent invested in these projects also grew from 8% to a surprising 65% (see Figures 2a and 2b). S.Asia also experienced increases as the number of projects grew from 9% of the total projects to 15% and investment increased from 8% of the total investment to 15%. Looking at the Asian regions together for 1982-1992, a noticeable dominance appears in both the number of and investment in higher education projects acknowledging gender. The Asian regions together account for 53% of the number of projects and 80% of the total project investment.

Total investment in higher education project acknowledging gender in the African region during the 1980s decreased to a mere 6% from 16% in the 1970s. The LAC region only received 2% of the total amount invested in higher education projects acknowledging gender, but there was a higher degree of gender parity in the region.[4]

c) Projects with specific interventions: Regional distribution of the number of projects which introduced gender-specific interventions during 1972-1981 shows the highest number of projects in both the EMENA (31%) and Africa (31%) regions (see Figures 3a and 3b). Additionally, relative to other areas, both EMENA and Africa received the greatest portion of investment, EMENA leading investment allocation with 49% and Africa following with 27%. Between 1982-1992, E. Asia led in projects with specific interventions, with 39% of the projects with significant gender-specific actions, and 65% of total Bank investment on such projects in all regions.

To summarize, over the last decades, the Bank's involvement in higher education has increased both in the number of projects and the volume of lending, despite a shift in overall Bank lending from higher education to primary and secondary education during the 1980s. Regional project distributions indicate that E.Asia received the largest amount of lending for higher education over the past two decades and tried a wider variety of specific interventions to reduce gender disparity. The Bank projects in all regions gave more emphasis in gender issues in higher education in the 1980s than in the 1970s.

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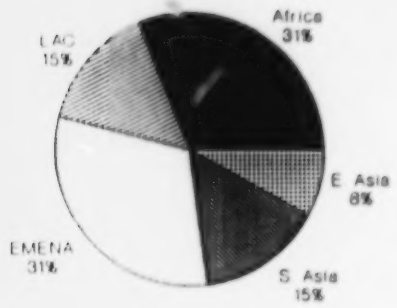
[4] Although LAC enjoys relative parity in tertiary enrollment, there remain "streaming" issues that affect female employment.

Figure 3a: Projects with Interventions
1972-1981



Investment in Intervention Projects
1972-1981

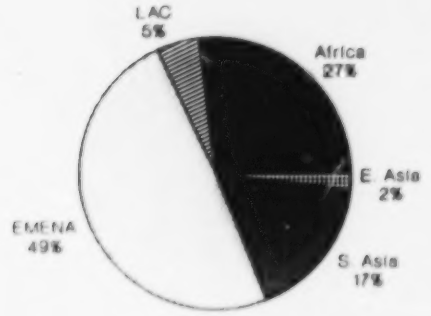
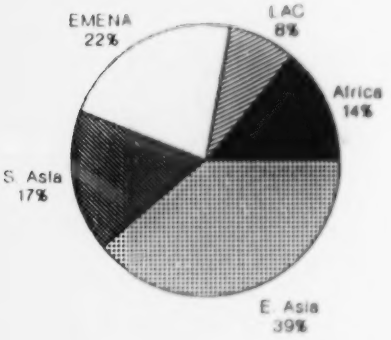
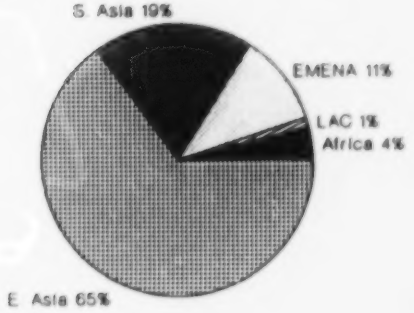


Figure 3b: Projects with Interventions
1982-1992



Investment in Intervention Projects
1982-1992



Source: Calculated from Table 1.

III. CONSTRAINTS TO FEMALE PARTICIPATION AND INTERVENTIONS

A. Identified Constraints in the Bank Projects

The specific interventions introduced need to be assessed against the backdrop of the specific constraints to women's participation in particular countries. The important questions are: What factors inhibit gender parity at the tertiary level? Which interventions (if any) have been introduced to overcome these identified constraints? Which are the successful interventions? Are there regional variations in constraints and interventions?

The constraints on female participation in higher education vary across regions and even within countries; however, certain patterns in constraints affecting women's participation in post-secondary education exist among most regions. One obvious initial constraint shared by several countries is the small pool of students completing secondary school. It is very difficult to increase women's access to higher education without raising female enrollments at the secondary level. Even if a pool of qualified female students exists at the secondary level, a number of other constraints inhibit women's participation in higher education.

1) Societal Constraints: In some of the Bank projects social constraints have been relatively well identified (see Appendix Table 1). For example, recent projects in India identified the lack of single-sex higher education institutions, inadequate hostel facilities for women and the lack of female teachers as major obstacles inhibiting women's participation in tertiary education. Suitable interventions to overcome the identified constraints have been proposed in the projects, including provision for single-sex institutions and dorm facilities for girls and provisions for increasing female teachers. Preliminary results indicate that these gender-specific interventions may have been effective, for currently these institutions are experiencing excess demand by female students.

However, few projects identified the social constraints to women's enrollment. One such constraint is parental attitudes towards educating their daughters. Only four out of 49 projects

which introduced gender-specific policies to increase women's access to higher education underlined the importance of social barriers on female participation in higher education.[5]

Ignoring social barriers in projects often results in failing to achieve targeted goals for female participation. For example, a recent project in Nepal introduced expansion-related policies such as reserving places for female students and providing dorm facilities in order to raise the low level of female participation in tertiary education. However, the preliminary results of the project indicate that the objectives set for female participation at the appraisal have not been achieved since only six percent of students were female despite the project's interventions due primarily to social barriers. Presently, a study is underway to examine the social constraints to female participation in higher education in Nepal.

2) Program of Study: Traditional vs. Non-Traditional Curriculum: The types of programs available to women in tertiary education also seem to affect female enrolment at the tertiary level. In some countries, the existence of an imperfect link between education and the labor market is cited as a major obstacle affecting women's participation in tertiary education. Often women are channelled into traditional fields of study irrespective of market conditions. Lack of marketability of women with post-secondary education can then act as a deterrent, discouraging women from seeking higher education.

In two recent projects in India, one of the significant reasons cited for low female participation rates in higher education was the limited breadth of course offerings, which instead centered around fields traditionally reserved for women. As skills in non-traditional fields are considered more marketable, there is greater interest in pursuing higher education in non-traditional areas. In a market situation similar to India, it would be logical to intervene through expansion in non-traditional fields.

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[5] By contrast, the negative attitudes of parents towards their daughters education at the primary and secondary education levels have received relatively better attention in projects.

Yet expansion of non-traditional fields may not always result in higher female participation in tertiary education. In countries such as Nepal, Korea, Indonesia, and Papua New Guinea, expansion of student places within non-traditional fields would not necessarily increase female participation in tertiary education. Bank projects in these countries noted low interest in and demand for non-traditional programs among women.

To overcome the low levels of interest in the non-traditional fields, the above-mentioned projects sought interventions to increase demand. A Bank-assisted project in Nepal, for instance, attempted to increase women's access by expanding and reserving student places for women in the fields in which women seemed most interested (e.g., architecture and electronic and rural planning). Two projects in Korea and two in Indonesia addressed the problem of low women's demand in non-traditional fields through public awareness campaigns. In Korea, for example, faculty planned to visit girls' schools for recruitment purposes for engineering, to send information to parents and counselors to increase community awareness of schooling opportunities of girls in non-traditional fields, and to invite interested girls to university campuses to increase participation in non-traditional fields.

In Indonesia, the problem of low female participation in science and engineering was recognized, and efforts have been made to encourage more girls to take up scientific and technological endeavors as career options through school visits by women returnees from abroad. It was also agreed that efforts would be continued to address the problem in future Bank-assisted projects.

3) Unequal Access to Quality Secondary Education: Unequal access to secondary education and poor quality of secondary education received by girls in much of Africa and East Asia has resulted in a limited pool of qualified female candidates for higher education (see Lee and Lockheed 1989). Unfortunately, the disadvantage women have in university entrance exams, due to lower quality of secondary education and girls' lower access rates to secondary education, often goes unnoticed and has been addressed in only a few projects. But a project in Tunisia identified the low representation of women in science and math related disciplines at

the secondary education level as a main factor of the low participation of female students in science and technology related fields at the tertiary level. Moreover, girls' tendency to have lower completion rates at the primary and secondary levels was noted as a major obstacle to women's access to higher education in projects in China, Malawi, Mali, and Niger. To broaden this pool, student places for girls in teacher training program and dormitories were reserved in Malawi and Niger, respectively.

4) Lack of Dorm Facilities: In general, higher education institutions in most developing countries are established in relatively well developed urban areas. Most people, especially from rural areas, have limited access to higher education because of the distance to higher education institutions. The distance problem is a particularly critical obstacle for girls since parents often are concerned about their daughters' transportation to distant institutions and about their living alone. Provision of culturally appropriate boarding facilities is often used as an approach to reduce the distance problem to increase female participation in tertiary education, and lack of boarding facilities is identified as a barrier to female participation. However, only three projects identified the lack of culturally appropriate boarding facilities as a constraint on female participation in tertiary education. A Bank-supported project in Yemen provided culturally appropriate hostel facilities on the campuses of the Faculties of Education which increased female enrollment by about 50%. In India there is also evidence that the low women's demand for higher education is due partly to the lack of separate dorm facilities for women.

Interventions without Analysis: One interesting trend observable across all regions throughout both decades is the tendency to introduce gender-specific interventions without proper analysis of the gender barriers (see Appendix Table 1). For instance, when enrollment rates for women are relatively low, often it is believed that simple expansion of school places and/or provision of boarding facilities for female students will increase the enrollments of women in higher education. As a recent Bank study on secondary vocational education found, the results of such an assumption have been often disappointing because the low participation rate of women in higher education may be due to factors other than lack of space or accommodation. Failure to recognize these factors may prohibit the project from realizing the objectives set at appraisal

(see Box 1).

Box 1: Projects Without a Critical Analysis of Constraints

In some countries simple expansion of student places may not result in an increase woman's access if low household demand for higher education is weak. In such a case, identifying constraints on female education and introducing specific policies to overcome them are key to having a successful project.

In response to the observed shortage of female teachers (i.e. favorable demand situation in the labor market), Pakistan's Third Education Project (1977) attempted to increase output of female teachers by construction and expansion of female teacher training institutes. Female teacher training capacity was increased by 50%. But the PAR (1990) found that although the expansion objective was ultimately achieved, project facilities had been consistently underutilized and underenrolled.

Morocco's Fourth Education Project also sought to increase the output of both male and female skilled teachers by expanding five different post-secondary education institutions. All programs would be open to women, with a target 20% female enrollment. The PCR found that the five higher education institutions assisted under the project remain under-enrolled. Only one third of the target enrollment figures was achieved.

Similarly, Morocco's Fifth Education Project assisted with the construction and equipping of four secondary teacher training institutes in science and mathematics, with 3,860 student places (of which about-one third would be women). However, the PCR found that enrollments are well below the specific objectives set at the appraisal.

A recent Bank-assisted project in Nepal provided dorm facilities and reserved student spaces for girls. However, the preliminary results of the project indicate that the objectives of the project set at the appraisal have not been achieved due to low private demand for education.

These examples of underutilization of the existing capacity suggests that mere expansion of places is not enough when multiple social and/or economic barriers inhibit female participation in higher education. Further research and analysis of the constraints need to be performed to formulate appropriate strategies to overcome them.

Within the EMENA and Africa regions, most projects failed to identify the specific constraints prior to introducing interventions. Interventions were introduced without regard to gender constraints affecting women's access to higher education. This mismatch between identified constraints and interventions is the primary reason for the observed low enrollment at the tertiary level notwithstanding expansion of higher education institutions.

In comparison with the EMENA and Africa regions, projects in S.Asia and E.Asia analyzed constraints inhibiting female participation in higher education more closely. In India, for example, three recent projects identified the lack of programs in non-traditional fields as one of the major constraints on female participation in higher education and in the labor force.

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Similarly, a project in Nepal identified the low demand for mechanical and civil engineering programs and strong demand for agriculture and rural planning and architecture. Expansion of these programs is expected to enhance women's access to higher education.

LAC projects fail either to identify the barriers affecting women's access to higher education or to propose interventions to overcome them. Yet LAC countries still report gender disparities in non-traditional fields. Some studies reveal exclusion of women from specific technical schools in both the Dominican Republic and Paraguay (White et al., as quoted in Abadzi 1989, p.41) and among rural populations.

In sum, the identification of constraints on female participation in higher education varies considerably across regions. In S.Asia and E.Asia, analysis of constraints on female participation in higher education preceded project formulation. On the other hand, identification of constraints appear with less frequency in the Africa and EMENA regions.

B. Analysis of Interventions

Bank projects included the following interventions:

- General expansion of student places
- Expansion of places in traditional fields for women
- Expansion of non-traditional fields of study
- Provision of single-sex higher education institutions
- Modification of admission criteria for girls
- Provision of scholarships and other financial assistance
- Expansion of boarding facilities
- Recruitment of women faculty
- Introduction of community awareness campaigns
- Provision of counseling and guidance

Overall, there is a rich diversity of gender interventions tried across all regions (see Appendix Tables 2 & 3). Seventeen completed and 45 recent-ongoing projects introduced specific interventions. Figure 4 below shows that the most extensively used intervention across all regions (21/62 projects) was expansion of student places in traditional fields for women (i.e., teacher training, nursing, home economics). Expansion of conventional fields was more widespread in many of EMENA and Africa region countries where the structure of economy was extensively agrarian, and female participation in the relatively small formal labor market was considerably limited due to traditional and cultural factors.

a. ***General Expansion of Student Places:*** The most common intervention used to increase female access was the expansion of student places earmarked for girls, under the assumption that women would consequently participate in education. In many instances, projects without identifying specific constraints affecting women's participation assumed that expansion of higher education institutions would automatically increase the number of female students.

Wherever there were no inhibitions for women to join the formal labor market, women have benefitted from the expansion of higher education institutions. In some countries, increases in the supply of places in higher education institutions have contributed to increasing women's access to higher education. However, the degree to which expansion-related policies have increased women's access to higher education varies among countries and regions, depending upon the ease of access of women to the labor market.

If there are a limited number of student places, many young persons will not be able to attend college. Women are at a particular disadvantage in competing with men for limited student spaces due to negative social and institutional factors affecting their ability to attend higher education. In such cases, it may be sensible to reserve spaces for women when expanding institutions of higher education. In Nepal, for example, two recent projects plan to reserve 10% of the student spaces in the expanding agricultural institutes and the Institute of Engineering for women. Another project in Ethiopia plans to reserve 10% of the seats at the new agricultural department. Reservation of student places for women may serve an effective intervention to ensure availability of space for women planning on enrolling in particular institutions.

Another approach would be to decrease the distance to institutes of higher education by extending educational opportunities to the rural and remote areas. Provisions can be made through extension classes or through building new facilities away from the main campuses. A promising project in Tunisia, for example, will establish campuses in different locations in an attempt to expand higher education institutions in remote areas. Recruiting locally is assumed to create an opportunity for women to participate higher education. Moreover, a Bank-assisted project in Oman will also expand primary teacher training institutes in rural and remote areas. The decentralization of teacher training together with provision for boarding facilities is hoped to ensure increased access for females.

b. ***Expansion of places in traditional fields***: Traditional fields in countries with more restrictive cultures appear to be more acceptable for women and motivate them to continue their education and enter the labor market. Therefore, expansion of women's opportunities in these fields in such countries seems to be a rational way of beginning to improve women's access to higher education. Unfortunately, although this approach has increased female participation at the tertiary level, women tend to be concentrated in fields with low rates of return, because wages tend to be low in traditional fields.

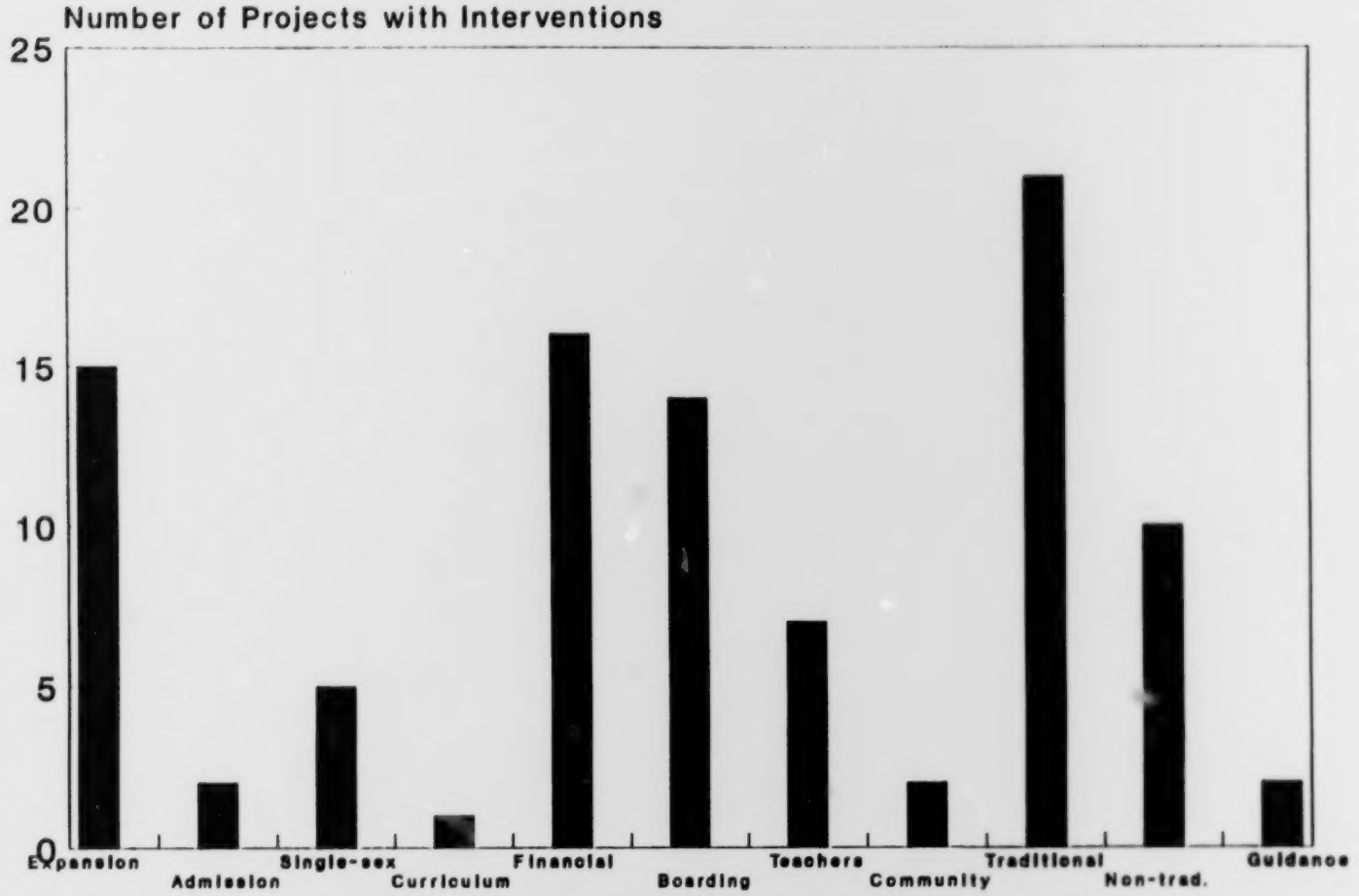
Box 2: Increasing Women's Access to Traditional Fields

Twenty-one of the 62 projects with specific interventions proposed to expand traditional fields for women in hopes of improving women's participation in higher education and in the labor force. Bank projects assisted the expansion of traditional fields for women in many of EMENA and Africa region countries where the participation rate of women in higher education is very low.

A recent project in Yemen has addressed the need to increase the supply of female teachers at the secondary level by building and renovating hostel places for 1,040 female students and expansion of existing Faculties of Education. Although no results are presently available, female enrollment is expected to rise in the Faculties of Education by 50%.

Similar measures were introduced in Jordan where women are well represented in higher education but underrepresented in the labor market. One of the developmental objectives of the Government is to raise the participation rate of women in the labor force. To alleviate a shortage of health technicians, the project will assist in expansion of a Nursing/Paramedical Integrated Training Institute. An increase in student spaces in these fields is a response to increasing demand for specific labor consequently in fields traditionally sought by women.

Figure 4. Specific Interventions by Type



c. ***Expansion of Non-Traditional Fields:*** In contrast with the above-mentioned intervention, the expansion of traditional fields in S.Asia, E.Asia and LAC regions has discouraged women from participating in higher education because these fields failed to provide necessary skills for employment in the growing formal sectors in countries. Recognizing this need, recent projects in India paid particular attention to the fact that higher education institutions for women ought to provide marketable skills to women by expanding polytechnics for women in non-traditional fields such as computer application, precision instruments and textile design. Certainly, this difference in the expansion of higher education for women between regions reflects not merely cultural differences but also the differences in the demand in the labor market and the size and dynamism of the formal sectors.

In India, for instance, although a high demand for technicians in emerging fields such as computer applicants, textile design, home appliances and precision instruments existed, most higher education programs for women were traditional. An important aspect of three recent higher education projects in India is to provide a better link between higher education and employment from women's perspective. The project helped to expand polytechnics for women and to diversify the curriculum in the new and emerging fields. The preliminary results indicate excess demand for admission into the women's polytechnics.

Similarly, a current project in the Philippines attempted to improve employment and training policies and increase efficiency in the labor market by meeting the skill needs of the labor market, particularly with regard to women, through expansion of vocational training projects. The project supports non-formal, vocational training for women in rural areas and aims to support poverty alleviation by encouraging women to participate in non-traditional fields.

Interestingly, Sudan is making a major effort to increase women's participation in non-traditional-fields and formal labor market, to have a fuller participation of women in the development process and overcome projected chronic labor shortages. As women have been almost entirely confined to training in traditional fields such as home economics, nursing and teaching, they are reluctant to seek higher education because it yields few high-paying jobs. The

project would increase female access to a variety of occupations at the level of technicians through its support to training facilities, and in turn contribute to the resolution of skill shortages.

A recent project in Tunisia also provided measures to increase women's access to non-traditional fields in the five Higher Institutes of Technology. Introducing a wide range of disciplines would attract more women to technical fields and create more employment opportunities for women in these areas.

e. ***Provision of Single-Sex Higher Education Institutions:*** Providing separate, single-sex schools is often used in culturally conservative countries where parental attitudes and societal restrictions limit women's participation in coeducational institutions. In India, for instance, the lack of single-sex post-secondary institutions is one of the important barriers to women's participation. Consequently, the provision of single-sex institutions would most likely increase women's participation both in higher education and the modern sector labor force. Similarly, the lack of culturally appropriate dorm facilities are also among factors affecting female participation in EMENA, S.Asia and African regions. Provisions to provide separate facilities in culturally conservative areas may well increase female participation in higher education.

Bank-assisted projects supported single-sex higher education institutions in countries where societal and parental resistance to coeducation exist, alongside private demand for girls' higher education. For instance, a project in Oman would expand girls' access to post-secondary education by providing a primary teacher training college for women. Similarly, a project in Pakistan attempts to increase the supply of primary and middle school teachers, particularly for girls' school in rural areas. Under the project three new female teacher training institutes would be established and seven existing institutes would be reconstructed and expanded. The project would expand female teacher training capacity by a 50%. Interestingly, recent projects in India attempted explicitly to increase female participation in higher education and in the labor market by expanding women's polytechnics.

f. ***Modification of Admission Criteria for Girls:*** Women attend poorer-quality schools in disproportionately high numbers. Gender streaming is also evident at the secondary level in many countries since women are restricted to access to a broad range curriculum particularly in the sciences and conditioned by biased learning materials and classroom dynamics (Lee and Lockheed, 1989). However, modification of admission criteria for women to facilitate them to join non-traditional fields of study appear only in a few projects, although these measures might be very effective in increasing female participation in non-traditional fields (i.e. science and technology). One problem is that the programs in the secondary schools fail to adequately prepare women in mathematics and sciences thereby limiting the qualified applicant pool for advanced education in non-traditional fields as in the case of China.

Some countries have tried to increase the number of female students through modifying admission criteria. For instance, an ongoing project in the Gambia attempted to establish new admission criterion for primary teacher training institutes to increase women students by 40% by 1996-1997. The Government is making efforts to increase the number of female teachers in traditionally male-dominated fields such as science and mathematics. Increasing the proportion of women in the teaching force would provide role models for school-age girls. Papua New Guinea experienced low female participation in teacher training college. One development strategy listed by the government was to equalize participation of women. In late seventies, a Bank project in Papua New Guinea supported the revision of selection criteria for college entrance requirements to increase the number of female trainees in other sectors (other than teaching). In Ethiopia, the Government would also modify the admission criteria for teacher training institutes to encourage female candidates. Moreover, the Commission of Higher Education also planned to reduce constraints hindering entry and enrollment and modify the higher education environment by (i) providing counseling and career information services; and (ii) expanding selected academic programs.

Students from remote areas have received extra points in the entrance examination for certificated course to increase equality among regions in Nepal. In addition, the Government would introduce a six-month remedial program for students with weak educational background

in science, mathematics and language.

A recent study by the Government of Zimbabwe concluded that women are likely to remain a minority in all scientific and technical fields for many years, unless some marked changes occur in the country's education and training systems. Thus, the report recommended preferential admissions (quotas) for women entering scientific and technical fields (World Bank, 1991d).

These examples suggest that though used in only a few cases, curriculum reform, modification of admission criteria and quotas do contribute to expanding female enrollments in higher education. However, these interventions will be of little use if women receive poor quality education at the secondary level, especially in mathematics and sciences, as this would negate the beneficial effects of quotas and curriculum reform.

g. ***Provision of Scholarships and Other Financial Assistance:*** Provision of financial incentives such as financial aid and free tuition, transportation and accommodations are extensively used interventions. Though few projects identified the direct and opportunity costs of higher education as a deterrent to female participation, possibly because higher education is already subsidized for all in many countries, many projects either introduced or mentioned offering scholarships or other financial assistance as a means to increase female participation in higher education. Provision for financial assistance is likely to be most effective in areas where scarce resources of poor families affect parents' abilities to send girls to higher education (Wold Bank 1991). For instance, in Indonesia, low female enrollment in the rural areas was found to be due to high direct and opportunity costs of women's education. The Government objective is to create financial incentives to recruit women in rural areas to be candidates for primary teachers. Therefore, a recent project would increase recruitment of female candidates by providing financial aid and dormitory facilities.

Yet, financial aid, free tuition and boarding have not always been successful in raising

women's participation in higher education.[6] Low demand for education even with provisions for scholarships is most evident in socially conservative countries where scholarships encouraged women to travel overseas. One example is a recent Bank-assisted project in Papua New Guinea which envisaged increasing the number of women with graduate degrees by providing overseas scholarships. The project would finance an overseas scholarship program, and special preferences would be given to identify female candidates. However, the preliminary results of the project indicate that there has been low female participation in these programs principally because many women are reluctant to go overseas alone. Thus, provision of financial assistance for foreign education may not be a sufficient intervention where additional cultural barriers inhibit the effectiveness of the scholarships provision involving overseas travel by women.

But the same incentives proved beneficial in a culturally less restricted environment. The experience of Indonesia from two Bank assisted projects appear to be very promising regarding women's participation in the overseas graduate programs. Projects stated that the nomination and selection of candidates for fellowship for overseas training will emphasize increasing the participation of women in the public sector. The process to increase female participation will be monitored. Preliminary results indicate that female participation approaching the 25 percent target. Efforts are being made to further raise female participation in overseas fellowship.

A recent study about the constraints on female participation in overseas training programs found social barriers were extremely important for overseas training. The study suggested three policy options to overcome social resistance: first, a consultation with the family may be useful to receive the support of family; second, a shortening of the period for overseas studies may help increase demand; finally, increasing the age of application for overseas education from 35 to 40 years old might attract more women married and/with children.

h. ***Expansion of Boarding Facilities:*** In increasing student spaces, it is logical to consider the provision for boarding facilities available to women as many colleges are often located in urban areas, especially distant from rural families. Lack of boarding facilities might

[6] In India, according to some observers, financial aid did not help women enroll in local colleges and universities but not for overseas study. This is yet to be documented empirically.

discourage female participation in higher education proportionally more than for male. However, provision of dorm facilities might also increase women's demand for higher education. For instance, expansion of dorm facilities at the agricultural training college in Jamaica increased women's participation rate more than was expected. According to the project audit report, future provisions for boarding facilities for women would doubtless increase female enrollment given unmet demand for women's training in agriculture. Current projects in India and Yemen recognize this need and provide dorm facilities where distance away from families might be a factor. In a project in Yemen, for example, the provision for culturally appropriate, single-sex hostels is expected to increase female participation by 50 percent at the Faculties of Education (see Box 3).

Box 3. Yemen's Experience in Raising Female Enrollments

A recent project in Yemen proposed to expand women's participation in higher education because of concern for shortages of women teachers and high costs of expatriate teachers. Although the project aimed at increasing educational opportunities at the secondary education level for girls by increasing the female teacher supply, the project introduced policies to improve women's access to higher education.

The project found that cultural factors play a significant role for women's access to education, particularly in the rural areas. The lack of culturally appropriate housing for women at the Faculty of Education also limits women's access to tertiary education. Interestingly, inequality in educational delivery was also noted as one of the obstacles that women confront. Interactions between professors and women students are limited due to cultural factors.

Under this project hostels would be built on three campuses to house approximately 800 female students. Existing hostels facilities in Aden for 240 women students would also be renovated. The provision of dormitories is expected to increase female enrollment at the Faculties of Education by about 50 percent. The stipends provided by the Government must be better targeted to ensure that needed groups such as women and rural teacher s are brought into the system. This measure provides for stipends from the Government for all female students while male students receive a targeted financial aid based on their achievement at the secondary education level.

In addition, the project noted that the Government stressed the importance of women's participation in education and in the labor force. An Advisory Group for Trained Manpower (AGTM) would be established. The main purpose of the AGTM would be to review the requirements for trained manpower on an annual basis and to provide direction within tertiary education. Among other things, the AGTM would also adopt or recommend policies to the Cabinet regarding meeting gender needs.

The project diagnosed remarkably well the constraints on female participation in higher education, and adopted a "package approach" in providing several measures together, which would significantly contribute to increasing girls' and women's participation in secondary and tertiary education.

i. ***Recruitment of Women Faculty:*** Although there is little empirical evidence to substantiate a link between the number of women faculty and the number of female students at the tertiary level, it has been suggested that lack of women as role models within non-traditional

fields may have an influence on the acceptability of women in fields where women have been traditionally under-represented. The lack of female faculty has often resulted in inequality in educational delivery and high dropout rates for women. Recognizing this problem, the University of San'a in Yemen attempted to increase female faculty at the College of Education with some significant success.

Current projects in India also provide female instructor training institutes for women's polytechnics. Instructor training would be offered for 16 fields in four instructor training institutes. Similarly, a current project in Nepal also recognizes the influence of women faculty on female students and provides fellowship to women candidates with the hope of increasing female faculty in the engineering department. Through raising the quality and number of women faculty in the engineering department, the project will provide role models for engineering students, influencing the acceptability of women in engineering.

A more promising development in recent Bank-assisted projects is that overseas female education for graduate studies received particular attention from the recent projects. A few ongoing projects in Indonesia and Papua New Guinea provided incentives for female students to participate in overseas training. To attract more women candidates, the fellowship programs were designed to be flexible to accommodate women's needs. For instance, the project would, if necessary, assist women with families to return to home during long vacations. Preliminary results indicate the flexibility built into the project design encouraged greater participation of women candidates.

Nonetheless, the problem of low female participation in science and engineering related fields is persistent and is not easy to resolve. Even in a country which has a large pool of skilled manpower, such as India, difficulties are being experienced to recruit women teachers.

j. ***Community Awareness Campaigns:*** Evidence suggests that community awareness campaigns are particularly effective at the primary and secondary education level

(Herz et al. 1991). However, this intervention has not been tried in many countries in higher education. Only three out of 62 projects with interventions have introduced components for public awareness about women's higher education. Two recent projects in India included a very promising public awareness campaign regarding the project, programs and the benefits of the girls' education at the tertiary level. This innovative approach used a National Information Center, television and press coverage of the projects and public meetings about the project and programs. In addition, employers were informed about the graduates, providing employment prospects for graduates. Similarly, in Korea public information campaigns were introduced in a leading undergraduate technical institute (Korea Institute of Technology) to overcome the low enrollment of women in institutes focusing on science and engineering. The leading undergraduate university proposed to introduce a program to attract more female students to their campus. Although it is to early to assess this intervention, preliminary results indicate that it has been successful in attracting more female students in science and technology fields.

k. ***Counseling and Guidance:*** Although the provision of counseling and guidance is mentioned in vague terms in a few projects, introducing such a policy at the secondary education level may have a positive impact to improve women's access to higher education. Since the early 1970s, in many developing countries admission to higher educational institutions has been generally based on some form of university entrance examination due to an excess private demand for higher education. Provision of counseling and guidance at the secondary level is important to make the best career decision, especially in countries where there are no career information centers and role models are few. Though the projects have not directly supported any interventions regarding counseling and guidance at the secondary level, they pointed out that a number of policies by either government agencies or universities would be introduced.

Although often a provision for counseling and guidance is suggested in a project, specifics are frequently left unmentioned within the project context. As noted above, however, one particularly impressive project in Korea outlines specific actions to be undertaken in an effort to increase more women in science and engineering fields. To overcome the low female

enrollment at the Korea Institute of Technology, the institute itself will introduce the following program to attract more female students: a) The faculty of KIT will visit girls' school to recruit interested women; b) The KIT will send information regarding science and engineering opportunities to the parents and counselors of targeted women; and c) KIT will encourage visits by women students to the campus to learn further of the opportunities available. With the outline of specific counseling and guidance actions to be undertaken, it is expected that more women will become interested in pursuing careers in science and technology.

IV. QUALITY OF INTERVENTIONS

In order to get some idea about not only the number of interventions but also the quality of overall effort made in each project to address the gender problem, interventions are rated as follows:

Rating Index	Qualitative Norms of Rating
1	No constraint analysis done; a single, passive intervention was introduced.
2	General expansion of enrollment to meet the (observed) demand in the labor market.
3	Introduced more than one intervention, but not based on a prior analysis of constraints.
4	Introduced a single (specific) intervention based on a prior analysis of constraints.
5	Introduced multiple interventions based on a prior, thorough analysis of constraints.

The rating index is based on interventions only, and not on the basis of the achieved results from the interventions.[7]

The number of interventions along with the average quality rating index are shown for

[7] As we already mentioned, the results from many recent projects are not yet known.

each region, and for the country classifications in Table 2. Quite clearly, in terms of both number of interventions and the quality rating index, projects in South Asia appear to be more promising. In East Asia, the number of interventions is small, but the quality is high. In Africa and EMENA the number of interventions and their quality is much less satisfactory.

When countries are classified according to the income range, there is not much difference in the number of interventions, but the quality rating index does increase with GNP per capita. However, neither the number of interventions not the quality rating index seem to be related to the structure of the economies as revealed by the proportion of service sector employment, and the proportion of girls in secondary school

It would be interesting to know whether projects with a high quality rating index were more successful in improving female enrollments that others. Unfortunately, the sample size of these projects with results is so small that no statistical tests are possible. However, preliminary results of the projects with a high quality rating index indicate that the projects with a high quality of index did succeed in improving female enrollment. In comparison, the projects with a low quality rating index failed to improve female participation.

V. LESSONS FROM BANK EXPERIENCE

This section discusses the promising approaches and policy options for increasing female enrollment in higher education. We examine both the projects for which some results are available and on-going projects for which the results are not yet available. Some conclusions about the effective and promising approaches for increasing female enrollment in higher education are given at the end.

Table 2. Qualitative and Quantitative Treatment of Gender-Specific Interventions

	Average No. of Interventions	Average Rating Index
Total	2.15 (62)	2.92 (62)
Regional Variation		
Africa	1.7 (14)	2.93 (14)
E. Asia	1.9 (16)	3.3 (16)
S. Asia	3.6 (8)	4.0 (8)
EMENA	2.1 (18)	2.4 (18)
LAC	1.6 (6)	2.0 (6)
Country Socioeconomic Factors		
Income Level		
Low	2.03 (16)	3.13 (16)
Lower-middle	2.33 (12)	2.79 (12)
Upper-middle	2.17 (3)	3.50 (3)
Employment in Service Sector		
<0%	2.13 (7)	3.12 (7)
0-0.9%	2.56 (7)	3.14 (7)
15-25%	2.25 (8)	2.84 (8)
>25%	1.75 (2)	3.90 (2)
Female Secondary Enroll. Rate		
<20%	1.67 (11)	3.00 (11)
20-35%	2.17 (6)	2.80 (6)
>35%	2.08 (6)	3.08 (6)

Notes: Figures in parentheses represent number of projects. The number of interventions is inclusive of interventions such as monitoring, needs assessment and government policies.

To assess the results of Bank-assisted projects with gender specific interventions, we examined available PCRs and PARs. Overall, sixty-five projects had PCRs and/or PARs.

However, our analysis had to be limited to the seventeen projects that introduced gender specific interventions, because many PCRs and PARs failed to quantitatively measure the impact of the project on women's enrollment rates during and/or following project implementation, even though the appraisal reports included components to overcome gender disparities (see Appendix Table 2).

Overall, four projects succeeded in meeting the stated gender objectives, five projects were unable to meet stated gender objectives, and four projects partially met gender objectives. On four projects nothing can be said since no measurement of success disaggregated by gender is available.

A. Project Results

1. *Projects Successful in Meeting Gender Objective*

Although it is difficult to draw general patterns due to the extremely limited project experience, one thing is clear: demand for skilled women in the labor market was critical for the success of the projects. There seemed to be no strong correlation between the number and type of interventions introduced and the projects' success; the most influential factor among successful projects was a strong derived demand for higher education by women in response to favorable labor market conditions rather than any specific type or number of interventions introduced. This suggests that where a strong demand exists for women with higher educational or technical qualifications, even simple expansion of student places will improve female enrollments.

This point can best be illustrated by Jordan's First Education Project which expanded student spaces by providing a coeducational Teacher Training Institute (TTI). The results indicated that participation of women has been greater than envisaged. In contrast to the equal proportion of male/female enrollments anticipated for the TTI, the proportion of female trainees increased to about 66 percent in 1978. Opposition against coeducational teacher training among staff and the community were outweighed by the positive reactions of the students and the advantages in the flexibility and variety of the programs. The other projects successful in

meeting gender objectives were similarly due to a large extent by the high private demand for higher education among women.

2. *Projects Which Failed to Meet Gender Objectives*

In contrast to the projects for which there was success, among the projects which failed to meet the gender objective the common problem was low demand for tertiary education by women. The reasons for the subdued demand could be many. First, women's entry into the formal labor market is restricted by strong cultural factors (e.g., Yemen). Second, despite favorable demand conditions, parents may be unwilling to send their daughters unless their specific concerns are met by suitable interventions. Third, low participation rates in both primary and secondary education may result in a low demand for higher education (e.g., Pakistan and Morocco). In all these cases, mere expansion will not be very helpful in rasing the level of women's participation in higher education. Focus then ought to shift to the causes of the low demand and introduce appropriate interventions.

For example, a project in Pakistan expanded spaces in Teacher Training Institutes with the intention of meeting labor market demands for trained teachers; the government could only meet 27 percent of the demand for women teachers. The project constructed three new female teacher training institute (770 enrollment capacity) and expanded student places in seven existing institutes (2,270 enrollment capacity). Upon completion of the new structures and student spaces, it was found that the project facilities were consistently under-utilized and under-enrolled, because the project neglected to evaluate the specific constraints faced by women candidates during their schooling and later in the job market.

However, mere assessment of constraints alone may not be sufficient to guarantee successful project interventions aimed at increasing women's access to higher education. In a project in Papua New Guinea, for example, the identification of the constraints was based on unsubstantiated theory. When the assumption made proved inaccurate, the project was unable to meet gender objectives.

In some countries, the demand for higher education places varied according to the

available programs. The existence of a high female enrollment rate in secondary education , a high general demand for educated women within labor market, and the availability of student places do not necessarily increase women's access to higher education, unless the educational programs offered to women link to specific demands in the labor market.

3. *Partially Successful Projects*

Four of the 17 projects have partially achieved the objectives set within the appraisal reports. Partial achievement of the goals may be related to the nature and quality of interventions introduced.

In Kenya, for instance, a Bank project assisted in establishing two agricultural institutes which planned to offer two-year certificate courses in agriculture with a special home economics option for women. Two projects reserved 25 percent of the student places for women. Preliminary results of the project indicated that two institutes were able to expand their enrollment capacity as planned. Surprisingly, upon project completion, one institute experienced a 5 percent improvement in women's enrollment rates over the percent anticipated during project appraisal, while the other institution failed to realize targeted objectives. The reasons for the shortcoming was cited in the PCR as imperfect advertising and registration procedures at the time the institute was set up.

4. *Unable to Determine Relative Success*

Occasionally, the PCRs do not enable one to determine whether or not the objectives of the SARs were realized. For instance, a project in Syria supported the establishment of two new Health Technician Institutes in which women were expected to comprise 50 percent of total enrollments. Cultural and social attitudes toward nursing were stated as a major constraints adversely affecting female participation in the nursing programs. Although the project itself did not introduce specific interventions to overcome the constraints identified, it noted that the government should intervene. However, because the PCR mentioned no gender specific outcomes, it is difficult to evaluate the project's impact on women. Interestingly, the Syrian project is not an isolated occurrence as we found four of 17 (23%) of the projects for which

gender interventions were introduced and for which PCRs were available had failed to adequately provide measurements to assess the impact of the project on female enrollment rates.

B. Approaches in the Ongoing Projects for Which Results are not Available

Since the mid-1980s the Bank has paid greater attention to gender issues in higher education projects. Increasing numbers of projects acknowledged gender issues in higher education and a significant number of them introduced interventions to overcome the barriers affecting women's participation in tertiary education. Many of these projects are recent and the outcomes are not yet available. However, the approaches currently being followed deserve to be discussed.

Increase the Quality of Education at the Secondary Education Level: It is logical to think that the quality and kind of education received at the secondary level will affect post-secondary educational enrollment. In many developing countries, the irrelevancy and poor quality of educational materials affect girls' enrollment at the primary and secondary levels (Herz, et al. 1991). Therefore, in some cases where quality of basic education is particularly low for girls, improvement of basic educational opportunities (i.e. by increasing opportunities in math and science classes), may ultimately increase women's access to higher education. In fact, many projects addressed the low quality of female education at the lower levels. In Mali the Government would revise curriculum to emphasize the basics. This would overcome parents' initial reluctance, and is expected to produce more literate and numerate graduates who will be more productive and better able to adapt to the demands of an evolving labor market or continuing into the higher levels.

A project in China, for example, is focusing on increasing the quality of basic education in order to increase women's access to further educational opportunities. Introduced provisions include: (a) publicity and heightened public awareness of the importance to society of education girls; (b) strengthening measures to make education compulsory; (c) improving conditions for rural teachers to retain teachers parents trust to educate their daughters; and (d) targeting provisions of cash to poor families that need to cover school-related expenditures. The project expects a more effective delivery of educational services will result in higher school attendance,

higher completion rates and reduce illiteracy rates, thereby increasing the applicant pool for continuing education.

Increase Flexibility and Diversity and Strengthen Links to the Labor Market: Rigidity in higher education programs has been a particular problem for women, especially for married and/or working women. Flexible programs in tertiary education help to increase women's attendance. Recent projects attempt to raise female participation in higher education through a number of innovative approaches in the design of programs. Short-term and part-time programs, night and weekend classes, and credit systems can enable working and/or married women to attend at a convenient time. The experience in India shows such interventions increased enrollment in higher education among working and married women. In Tunisia, a recent Bank-assisted project which provided short-term courses envisaged an increase in girls' demand for tertiary education. The projects in India also introduced flexibility in polytechnics program. Introducing a credit-system allowed women to enter and leave programs.

Provision of choice in higher education by increasing course offerings can also enable women to choose from a wider range of study, thus helping them tailor their education to private demand. In India, for example, such an intervention was particularly important, for the lack of demand for higher education among women was principally due to limited educational choice.

Because of the rapidly changing economic structures in developing countries, many countries are experiencing growth in the manufacturing and service sectors. The linkage between women's higher education and employment opportunities may prove important in increasing parental demand for tertiary education for their daughters (see Box 4).

One current project in the Philippines addresses the employment/education link by encouraging women to enter fields for which demand exists in the labor market. The program encourages women to participate in non-traditional fields and further supports ongoing projects to increase female participation in occupations in line with labor force needs. Moreover, to more accurately combine women's employment needs and interests, the project supports funds for a training delivery system which would help meet the training needs of women by supporting communities in identifying training needs for women and introducing matching programs.

Box 4. Pacific Countries Study

The Pacific Regional Post-Secondary Education study is one of a series of Pacific Country Studies being undertaken by the World Bank, encompassing Fiji, W. Samoa, Tonga, Kiribati, Solomon Islands and Vanuatu. The project evaluates the islands' institutions of higher education according to their responsiveness to market demands (notably with regard to women). The study's in-depth analysis of the participation of women in post-secondary education is most encouraging. One of the most striking features found regarding the labor force was that over the time period studied, there was a substantial increase of women. Currently, there is a shortage of women in teaching, nursing, business and technology.

In addition to the high demand for educated workers, many of the training facilities experience vacancies (from 27% in nurses training to 42% in professional and teaching areas in institutes of technology), suggesting the need for incentives to increase women applicants. The study highlights the following approaches for increasing female participation in institutes of higher education.

1. Increase scholarships for women: Although currently most Pacific Member Country students receive financial assistance to attend post-secondary education, only 30% of scholarships are allocated to women. Of the four types of scholarships currently offered, only one (Equity and Merit) allocates 50% to women, indicating that access to scholarships is currently skewed against women. The high rate of enrollment in the EM scholarship by women indicates the demand for women's scholarships exist.

2. Increase opportunities for women in high income jobs: An additional approach recommends making conclusive policy to increase the opportunities for women to train for high income jobs. The study found that the most important factor influencing the initiatives by female students was market demand. Interestingly, the demand in the labor market had an even greater influence on student action than parental guidance or counselor suggestions.

Increasing training options within higher paying fields would likely increase incentives for women to invest in higher education.

The Package Approach: Preliminary results indicate that where barriers to female access are particularly stringent, multiple interventions may be needed to overcome the constraints. No single measure can resolve persistent socio-cultural constraints affecting women's participation in higher education. Therefore, an increasing number of recent Bank-projects have introduced multiple interventions. For example, a recent project in Nepal is among best promising projects to improve women's participation in higher education in technical fields. The project identified the barriers affecting women's participation in higher education and introduced multiple interventions to overcome identified constraints (see Box 5).

Box 5. Package Approaches to Overcome the Constraints on Women's Higher Education: Examples from Recent Bank-Assisted Projects

Where barriers to female access to higher education are pervasive, multiple interventions may be needed to increase women's enrollment. The following are examples from a few recent, ongoing Bank-assisted projects which adopt a package approach to enhance female enrollment.

Nepal's Agricultural Manpower Development Project (1984): The project was designed to assist in improving agricultural training at the middle and higher levels. It was already decided that at least 10% student spaces would be reserved for women in middle and higher level agricultural training because the government of Nepal encourage women to actively participate in agricultural and rural development activities. Accordingly, the project introduced gender-specific interventions to increase female participation in agricultural higher education. First, the project would rehabilitate and renovate existing buildings to accommodate 600 agricultural junior technician assistant at two training center, of which 70 would be reserved for women students. Second, to accommodate students, additional boarding facilities for 180 would be constructed, of which 80 would be for female students. To attract more female students and students from remote and underprivileged hill areas to enroll at Institute of Agriculture, a total of 40 -three-year- local scholarships (120 student years) would be provided.

Nepal's Engineering Education Project (1989): The project aims at expanding Institute of Engineering (IOE) to train engineers and technicians in order to alleviate shortages of engineering personnel. Although IOE reserved 10% of student places for women, it had difficulty filling this quota. Of the constraints, lack of programs in which women were interested was cited. The project also identified the lack of appropriate accommodations for women at the IOE as a constraint to enrolling more women.

In addition to reserving seats for women, three additional measures were proposed in the project. First, separate hostel facilities for women would be constructed at each campus. Discussions with female students and female faculty members, indicated that the availability of these facilities would encourage more women to enroll in engineering education. Second, two new engineering degree programs that would be established under the project in which women were interested, viz electronics and architecture and rural planning. Experience in India, Bangladesh, and other countries in the region suggests that these courses attract women to engineering education. Finally, qualified female faculty would be given preference for the graduate and post-graduate fellowship training program in the project. Raising the qualifications and status of the female faculty is expected to have a positive impact on the acceptability of women in engineering and provide role models to women students.

Indonesia's Primary School Teacher Development Project (1992): The primary purpose of the project is to enhance primary teacher training through a newly developed program at the tertiary level. The program includes addressing the issues adversely affecting women's participation in teacher training programs (believed to be principally financial). The government plans to provide financial incentives through provisions of scholarships and boarding facilities. In recruiting the candidates for the scholarship program, preference will be given to women candidates in targeted recruitment areas for teacher training. The selected candidates will receive counseling and tuition support and the program will be evaluated to determine the effectiveness of the scholarships in attracting women. Efforts will be made to retain female participants.

Papua New Guinea's Public Sector Training Project (1990): In order to increase the percent of female participation in post-secondary education (currently 14% participation rate), the project proposes to offer financial incentives through provisions of overseas scholarships. The project aimed at increasing the number of women in non-traditional fields in particular. To a better link between employment opportunities with women's education, the project will identify the training needs of women to permit a more effective matching of needs with training opportunities. Through the combined approach of providing scholarships in non-traditional sectors and researching training needs of women, the Papua New Guinea project promises to not only increase women's participation in post-secondary education but to increase participation in areas of high demand.

These examples suggest that recent projects addressed the gender problem in higher education by introducing multiple interventions.

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Three recent on-going projects in India appear to be among the most promising projects aimed at improving women's access to higher education, for the projects not only expand higher education institutions for women but simultaneously address various constraints restricting women from fully participating in post-secondary education (Box 6: India's Experience). Preliminary results of these projects indicate that the package approach to overcome constraints to women participation is promising. Clearly, some on-going Bank projects with multiple measures are most to likely increase women's participation in higher education.

Box 6. India's Experience in Raising Enrollment: A Case of Package Approach

With the assistance of the Bank, India started an innovative program in 1990 to expand technician education for women through expansion of school places. A number of strategies to overcome various constraints on women's participation in polytechnics were introduced. Apart from expansion of places for women, the following were among the policies introduced to improve women's access to higher education: expansion of hostels, provision for financial aid (by the government), increased link between education and demands of the labor market, introduction of gender neutral curriculum, introduction of public awareness campaigns and flexible programs for continuing education.

Expansion of Places: The projects converted all male polytechnics into coeducational polytechnics and supported establishment of total 19 coeducational and 31 women's polytechnics. Before the projects were implemented, few women enrolled in coeducational programs, preferring instead to enroll in exclusively female institutions. The demand for existing 46 women's polytechnics and coeducational polytechnics was considerably low.

The Role of the Government: Since the beginning of the projects, the government has been very supportive, and perceived the projects as part of the Ten-Year Investment Program (1990-99). A female director who has been very active in women's education was appointed to the Project Implementation Unit. It was also noted that these projects were politically less sensitive because expansion of technician education was viewed as necessary due to a high demand for technician in the changing structure of economy.

Community Awareness Campaign: A large scale community awareness campaign is another significant component of the projects. The National Information Center was established to provide information about the projects and programs. A TV program about the projects was broadcasted on the national TV. In addition, there has been a widespread press coverage about the project, increasing public awareness about the programs. There have been seminars and meetings about the project and programs. To increase employment of female technicians, employers are encouraged to seek women technicians through the communication channel between institutes and employers.

Link to Labor Market: High demand for technicians in emerging fields such as computer applications, textile design, home appliances, precision instruments, and so on existed. However, the existing programs were traditional and did not facilitate the participation of women in modern sector wage employment. An important aspect of the projects is the establishment of a link between the polytechnics and the demands of the labor market. A modified curriculum introducing new programs in emerging fields resulted in an increase in the demand for polytechnic.

Flexibility of the Programs: Previously, rigidity of the programs excluded women who are working, pregnant and/or married. Greater flexibility in carry-over of earned credits enable pregnant women to return to college after delivery and continues education; part-time instructions further facilitated working or married women to participate in these institutions.

Gender Neutral Curriculum: After the project was started, the supervision team found that the curriculum at all levels of education was gender biased. In response, the projects introduced gender neutral curriculum at the technician education level, and encouraged the policy makers to revise the curriculum at the primary and secondary education level as well.

Although it is too early to examine the results of this on-going project, the project design appears to be among the most promising in Bank's projects in women's higher education. Preliminary results indicate that there is an excess demand for enrollment from women for higher education. Only one out of ten women applicants could enter these polytechnics. Why do the projects seem to be so successful in improving women's access to higher education? Apart from the design of the projects, the adoption of multiple measures to improve women's access appears to be an effective policy intervention.

C. Effective Approaches Under Diverse Socio-Economic Settings

In terms of effective approaches across countries, what broad patterns do these projects suggest? What are the typical constraints affecting women's participation in higher education across countries? Is there any relation between the effective approaches and the stage of country development and/or the nature of the socio-economic setting?

As noted above, differences in gender disparity are striking when comparing countries within different stages of development. What explains these differences? It is argued in the literature that a decline in the proportion of female participants in secondary and higher education in low-income countries as compared with middle and high-income countries suggests a relationship between women's access to higher education and a country's state of economic development (Verspoor 1990). In other words, economic growth measured by per capita GNP appears to be conducive to development of higher education and increased participation rates for women. Demand for girls' education is estimated to be more elastic than for boys', suggesting that demand for girls' education fluctuates more with the level of national income as contrasted with the more stable and constant demand for education experienced for boys (Schultz 1989; World Bank 1989c).

However, contrary to these propositions, considerable variation in female participation in higher education seems to exist among developing countries with similar levels of development, suggesting that factors other than income level may influence women's participation. Just as the level of development is an important determinant of the breadth and quality of higher education available (the supply side), the social setting of the country appears to be another important influence on women's demand for higher education. In Table 3, developing countries are classified according to income level (as low, lower middle, an upper-middle income levels according to their per capita GNP) and social setting of the country (ranging from difficult to moderate setting). Factors generating a "difficult" setting in which to improve women's educational participation include: cultural restrictions for female participation in education and in the labor market, dispersed population and low percentage of

Table 3. Characteristics of Countries and Promising Approaches: A Typology from Bank Experience*

Income Level (GDP/pc)	Social Setting	
	Difficult	Moderate
Low	e.g., Pakistan, Nepal, Bangladesh, Nigeria, Ethiopia •Expansion of traditional fields (Ethiopia, Laos) •Provision of Dorms (Ethiopia, Nepal, Niger) •Single-sex schools (Pakistan) •Reserving places (Ethiopia, Nepal, Malawi) •Establish new criteria for awarding fellowship (Djibouti) •Modifying admission criteria (Gambia, Ethiopia) •Provide targeted scholarship (Nepal, Indonesia) •Provision of overseas scholarships (Indonesia) •Introducing new programs with strong demand (Nepal) •Provision of counseling and career services (Ethiopia) •Monitoring female enrollments (Indonesia, Gambia)	e.g., Egypt, Kenya, India, Lesotho •Expansion of female polytechnics (India) •Expansion of traditional fields (Kenya) •Conversion of all-male polytechnics into coeducational institutions (India) •Provision of one polytechnic institute for the handicapped women (India) •Public information campaign (India) •Introducing gender neutral curriculum (India) •Reserving places for women (Kenya) •Link to Labor Market (India) -Provision of disciplines in technical fields. -Provision of the wide range of disciplines -School-industry partnership to increase employability of women graduates (India) -Examining the utility of technical training received by women •Recruit women instructors •Provide flexible curriculum •Provision of financial incentives (free tuition, transportation and accommodation)(India, Kenya) •Provision of dorm facilities (Kenya)
Lower Middle	e.g., Yemen, Algeria, Morocco, Papua New Guinea •Expansion of places (Algeria) •Single-sex schools (Yemen) •Provision of dorms (Yemen, Algeria, Morocco) •Public awareness campaign •Provision of stipends• (Yemen) •Modify admission criteria (PNG)	e.g., Turkey, Jordan, Tunisia, Bolivia, Philippines •Expand places (Turkey, Tunisia, Jordan) •Provision of coeducational schools (Jordan) •Boarding facilities for girls (Jordan) •Link to labor market (Turkey, Tunisia, Philippines) •Provision of disciplines in technical fields. •Provision of the wide range of disciplines •Improving Working Conditions -Improved working conditions and career prospects (Jordan) -Give greater responsibility to registered nurses and midwives (Jordan) -Reducing the period of obligated employment to one year for each year training (Jordan) -Provision of attractive salaries •Flexible course offerings (Tunisia) •Free boarding and lodging for female students (Jordan) •Provision of stipends (Jordan) •Reduce distance (e.g., establishing campuses in different locations (Tunisia).
Upper Middle	e.g., Libya, Gabon, Oman, Iraq, S.Arabia •Single-sex schools (Oman) •Increase quality at the tertiary level •Increase female faculty •Provision of boarding facilities (Oman) •Provision of training stipends (Oman) •Improving working conditions -Provision of attractive salaries (Oman) •Decentralize higher education programs (Oman)	e.g., Portugal, Korea, Hungary, Greece Brazil, Venezuela •Expand access -Traditional fields (Portugal, Korea) -Non-traditional fields •Increase quality at secondary and tertiary levels (Korea) •Link to labor market (Korea) •Counseling and Guidance (Korea) •Monitor and evaluate female enrollment trends •Public awareness campaing to encourage female to take courses in science and technology (Korea).

*Country examples given are promising interventions directed to improve female higher education in recent and on-going Bank projects.
Note: Some of these interventions are introduced by the governments and mentioned in the SARs.

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urbanization, infrastructural bottlenecks, and low levels of female participation in the secondary education. Countries characterized as socially less conservative are those having greater urban population and a medium or high levels of enrollment at the secondary level; these are classified under a "moderate" setting. Thus, from the available project experience, a typology of country situations and possible strategies can be delineated to remedy gender gaps in post-secondary enrollment.

Low Income and Difficult Setting: Available evidence suggests that countries with low levels of income (hence low supply of places) and difficult social settings (with low parental demand for higher education) may have the greatest barriers restricting female participation in higher education. Countries in S.Asia such as Pakistan, Nepal, and Bangladesh and much of north Africa fall into this category. Per capita GNP in these countries is below $500; the demand for women's higher education is very low due to factors such as high direct and opportunity costs, cultural restrictions of women's participation in education and labor force, distance to universities, low level of participation in secondary education and poor quality of secondary education for girls (Herz et al., 1991). These countries experience low overall enrollment rates both at the lower levels and at the tertiary level of education.

In difficult settings, women's access to any education, and particularly to higher education, is extremely limited, especially in rural areas. For example, in low-income, agrarian economies of Africa, women are particularly disadvantaged because they are expected to help considerably on the farm when they continue their secondary education. The effective approach appears to be not only an increase in the supply of student places and single sex institutions, but also introducing policies to increase the private demand for higher education since the house-level constraints have considerable effect on female participation. Despite introducing very gender-specific policies on the supply side such as reserving student places on single sex institutions for women in some countries, the projects often fail due to difficult socio-economic setting restricting the demand for higher education (e.g. Nepal and Pakistan). In such situations, the only promising approach is the introduction of multiple components in the projects, and encourage women in specific occupations as role models.

Low Income and Moderate Setting: Countries such as Egypt, India, and Kenya appear to have fewer social constraints inhibiting on women's participation in higher education despite their low level of national income. These countries are socially less conservative, moderately urbanized, have faster growth in their GNP, with medium or high female participation in secondary education. Often the problem in such low income/moderate category countries is the limited supply of school facilities and resources. Therefore, expansion related policies have often been successful in increasing female enrollment rates in higher education. Policies such as increasing student places, reserving places for women, and providing boarding places for girls have successfully increased women's access to higher education.

However, it is also interesting to observe that some of the low income/moderate setting countries have experienced an excess supply of trained personnel in some fields, especially in traditional fields for women, despite a demand for trained workers in non-traditional fields. This is one of the prime reasons of low female participation in technical post-secondary education in India. Establishing a link between labor market and higher education programs, then, is a critical factor in increasing female participation in this category of countries.

Lower Middle Income and Difficult Setting: Lower middle income countries within a difficult setting share constraints similar to low income countries with difficult setting, the greatest constraint being family or societal restriction. In Yemen, for example, higher education is accessible to students who have a respectable secondary education grade point average (World Bank 1992d). Accordingly, those who qualify academically have access to tertiary education. However, family concern about 'protection' of their daughters has been the main barrier on female participation.

Interestingly, in these countries, there has been a relatively high demand for educating women in traditional fields. For example, a recent Bank sector report on Yemen found that teaching is increasingly seen as a socially appropriate profession for females. Policy should focus on professions culturally accepted as suitable for females. Projects expanding places for women in such fields as teaching with appropriate housing for women would doubtless expand

female participation in higher education. Careful attention needs to be paid to the choice of fields and to culturally accepted modes of housing.

Lower Middle Income and Moderate Setting: Countries in this category often experience excess demand for higher education by both male and female students as existing higher education institutions are unable to accommodate all students who seek admission. Due to the limited supply of student places, entrance examinations or similar measures are used to determine the qualified students for higher education studies. As such, the constraint affecting women's participation in higher education in these countries comes from the cumulative effects of inequitable access to, and quality of, education at earlier levels. Since female students usually concentrate in non-science and mathematics programs at the secondary education level, access for them to higher education in the fields of science and engineering is particularly limited. Further, the existence of an admission exam appears to negatively affect women because they receive lower resources from their families (than for males) and are therefore less able to compete with the more affluent students preparing through private tutoring to enter the university (Kudat and Abadzi 1989).

Turkey, Tunisia, and Jordan are among the countries in this setting where the demand side problem almost does not exist. Limited space is the greatest concern for equal educational opportunity. Since women receive low quality of education at secondary level, they are less able to compete with boys for the limited spaces available in higher education especially in sciences and engineering. Expansion related policies result in an increase in female enrollment at the tertiary level. In addition, modifying admission criteria and reserving places for girls are promising interventions to increase female participation rates in higher education. Above all, addressing the quality of education and providing counseling and guidance at the secondary level will be imperative to improve women's access to higher education in these countries.

Upper Middle Income and Difficult Setting: Many oil-producing Arab countries fall in this category. Although they are classified as upper middle income countries, the social setting for female participation in higher education is difficult. Saudi Arabia, and Oman are among

these countries. Women's participation in the labor market is very restricted and concentrated in traditional fields. Accordingly, demand for higher education is also very limited due to factors such as family restrictions on female education. The effective policies seem to be to increase parental demand for their daughters' education. Provision single-sex schools in traditional fields seems to be the most effective strategy. In addition, community awareness campaigns identifying the benefits of female education may increase parental and hence female demand for post-secondary education.

Upper Middle Income and Moderate Setting: This category enjoys the most gender parity in higher education for all categories. However, women may lag behind men in non-traditional fields in many of countries, such as Greece, Portugal, Korea, and much of LAC region countries. The main constraint here is not the demand for higher education, but the link between higher education that women receive and the labor market. Gender streaming at secondary level is the prime reason for women's inability to gain access to non-traditional fields. Also, in some LAC countries, legal restrictions do not permit women to accept jobs in some professions. Reform of the legal framework and greater emphasis on science and mathematics at the secondary school are critical for overcoming gender streaming in these countries.

VI. CONCLUDING REMARKS

Bank project experience on what works to improve female access to tertiary education is so limited that it may be premature to draw firm conclusions. Many of the projects with interesting multiple interventions are currently ongoing. However, two conclusions emerge.

First, the key prerequisite for the observed success across countries of some interventions appears to be a strong demand for educated women in the labor market combined with a high private demand for higher education by women (and their parents). The degree of success of a project depended critically on the extent to which the project components were sensitive to the prevailing labor market situation for women and private demand conditions. Projects with often only a single intervention were successful in societies where the formal labor market is growing

and few social constraints or qualifications inhibit women's participation. Projects with single interventions are unlikely to succeed in countries where social factors, including low secondary enrollment rates for women, high direct costs of women's education, and high cultural restrictions within labor market were pervasive.

Second, the link between programs offered and the demands in the labor market is critical. High secondary enrollment rates, high private demand for women's education and the availability of student places do not necessarily guarantee an increase in women's participation in higher education, unless the programs are dovetailed to meet the specific demands in the labor market. It is not enough to overcome social barriers through policy interventions; future projects need to take an integrated view of the various social and labor market constraints, and include appropriate interventions in the project design.

The above conclusions underscore the inherent complexities surrounding women's participation in higher education. Fortunately, the Bank appears to be moving in a positive direction as a greater number of projects today are addressing gender inequities and taking action than was the case in the 1970s. Of the projects introducing gender-specific interventions in the 1980s, 62 percent were developed during the last five years (1987-1992). A number of recent Bank projects have multiple, inter-related interventions. Initial project results indicate that this combined or "package approach", well-grounded in country-specific circumstances, may prove to be an effective project design for enhancing female participation in higher education.

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Appendix Table 1. Identified Constraints and Interventions Introduced in the Bank's Higher Education Projects to Improve Women's Access to Higher Education

EMENA: 1972-1992

Constraints	Interventions
Constraints Identified in Project SARs: •Lack of culturally appropriate housing for women (Yemen 1991); •Absence of special programs to recruit female secondary graduate for teacher training (Yemen 1991); •Inequity in educational delivery (Yemen 1991); •Low representation of women in technical fields at secondary level precludes participation in tech. fields in higher ed (Tunisia 1992);	Interventions Introduced in the Project Design to Overcome Constraints: A) To overcome the constraints identified in the SARs: •Provide special hostel for women (build new & renovate existing)(Yemen 1991); •Intent to target women in stipend provision to provide financial incentives (Yemen 1991); B) Other interventions introduced in the project SARs: •Coordinate government agencies to adopt appropriate policies with the expected benefit of increasing the recruitment of women in teacher training programs (Yemen 1991); •Monitor women's needs and make policy recommendations according to needs determined (Yemen 1991); •Provide women's teacher training college with boarding facilities (for women) (Oman 1987); •Decentralize teacher training program with the expectation of increasing female access (Oman 1987); •Government will provide attractive salaries and training stipends for women (Oman 1987); •Introduce short-term programs with diverse curriculum (recruit locally) in hopes of attracting more women to technical fields (Tunisia 1992);

Africa: 1972-1992

Constraints	Interventions
Constraints Identified in Project SARs: •Limited and unequal access to education for women (Niger 1981); •High female drop out rates at secondary and primary levels (i.e. early marriage and parental attitude)(Malawi 1989; Mali 1989);	Interventions Introduced in the Project Design to Overcome Constraints: A) To overcome the constraints identified in the SARs: •Reserve dormitory spaces for women (Niger 1981); •Commission study to observe gender differences in school achievement and factors influencing school absenteeism (Malawi 1989); •Reserve places in teacher training program (Malawi 1989) B) Other interventions introduced in the project SARs: •Reserve places in agricultural institute (Kenya: 1978, 1981; Ethiopia 1987); •Monitor and evaluate female enrollment trends and issues regarding women (Gambia 1990; Guinea 1990; Mali 1989); •Establish new admission criteria for primary teacher training (Gambia 1990); •Expand school places in traditional fields for women (Gambia 1990); •Establish new department in traditional fields for women (Ethiopia 1975); •Government actions: modify admission criteria for teacher training institutes; expand technical and vocational opportunities for women; provide counseling and career services; coordinate women in development programs (Ethiopia 1987); •Provide student dormitories for women (Ethiopia 1987); •Expand non-traditional fields (Sudan 1984); •Establish new criteria for awarding fellowships for women (Djibouti 1989).

South Asia: 1972-1992

Constraints	Interventions
Constraints Identified in Project SARs: ●Low access to vocational training for women (India: 1989, 1990, 1991); ●Lack separate residential dormitories for women (India: 1990, 1991; Nepal 1989); ●Lack of single-sex schools (India: 1990, 1991); ●Low demand in areas of mechanical and civil engineering (with regard to women) (Nepal 1989);	Interventions Introduced in the Project Design to Overcome Constraints: A) To overcome the constraints identified in the SARs: ●Expand women's polytechnic institutes in non-traditional fields (India: 1989, 1990, 1991); ●Develop and expand degree programs for women in technical fields (India 1991); ●Create new advanced fields for women in women's polytechnic (India 1989, 1990); ●Reserve space for women in instructor training programs for vocational institutes (India 1989); ●Provide short courses in continuing education for women in technical fields (India 1990); ●Provide financial incentives: free tuition, transportation and accommodations (India 1990, 1991; Nepal 1989); ●Recruit female teachers (India 1990); ●Provide scholarships to targeted female students (India 1990, 1991; Nepal 1989); ●Introduce new programs in fields in which women seem interested (architecture, electronics, rural planning) (Nepal 1989); B) Other interventions introduced in the project SARs: ●Expand student spaces in traditional fields (Pakistan 1977; Bangladesh 1983; India 1972); ●Reserve student places for women in non-traditional fields (Nepal 1984, 1989); ●Provide scholarships for female students (Nepal 1984);

East Asia: 1972-1992

Constraints	Interventions
Constraints Identified in Project SARs: ●Parental attitudes against educating girls (Papua New Guinea 1976); ●Lack of female teachers (Papua New Guinea 1976); ●Low female enrollment in non-traditional sectors (engineering and science) (Korea 1989); ●Hesitancy among females to enter non-traditional sector (Papua New Guinea 1990; Korea 1991); ●Low completion rates in primary and secondary level among females (China 1992); ●Financial (China 1992; Indonesia 1992)	Interventions Introduced in the Project Design to Overcome Constraints: A) To overcome the constraints identified in the SARs: ●Revise recruitment procedures for teacher training to encourage representation of female trainees (Papua New Guinea 1976); ●Faculty to visit girls' schools for recruitment purposes (for engineering and sciences) (Korea 1989); ●Send information to parents and counselors to increase community awareness of schooling opportunities of girls in non-traditional fields (Korea 1989); ●Special opportunities given to women for (overseas) scholarship program (Papua New Guinea 1990; Indonesia 1992); ●Identify training needs of women to permit more effective training opportunities which meet demand and interest (Papua New Guinea 1990; Indonesia 1992); ●Invite interested girls to visit university campus to increase participation in non-traditional fields (Korea 1989); ●Conduct study to determine reasons for low participation rates for women (especially rural) (China 1992); ●Government to provide dormitory facilities (free) (Indonesia 1992); B) Other interventions introduced in the project SARs: ●Expand student places in traditional fields for women (Papua New Guinea 1976); ●Increase female spaces in non-traditional fields through overall expansion (Lao 1989); ●Finance student accommodations (Papua New Guinea 1976); ●Expand educational location to rural area to educate rural women (Papua New Guinea 1976); ●Revise college entrance selection criteria to increase number of women in non-traditional sector (Papua New Guinea 1976); ●Monitor female enrollment (Indonesia: 1985, 1988, 1989, 1991; China 1986, 1991; Lao 1989; Philippines 1992); ●Give equal opportunity to women for overseas fellowships (Indonesia 1985); ●Reserve percentage of fellowships for women in growing sector (Indonesia 1989); ●Give preference to women candidates for teacher training programs (Indonesia 1992);

Latin America: 1972-1992

Constraints	Interventions
Identifies Constraints in Project SARs: ●Most projects cite parity at tertiary level (with the exception of non-traditional fields).	Interventions Introduced in the Project Design to Overcome Constraints: Other interventions introduced in project SARs: ●Increase the recruitment of women teachers (Bolivia 1977); ●Offer fellowships for curriculum revision affecting women (Bolivia 1977); ●Increase enrollment opportunities at traditionally female colleges (nursing) (The Bahamas 1981; E. Caribbean 1987); ●Expand enrollment opportunities with the expectation that women's enrollment will increase through expansion (The Bahamas 1981); ●Government to monitor female enrollment levels in non-traditional sectors (industrial/commerce trade) (Ecuador 1982); ●Government will conduct study on training needs of women (Haiti 1985); ●Expand enrollment opportunities in non-traditional fields with the anticipation that women's enrollment will increase with expansion (Barbados 1986; E. Caribbean 1987);

Appendix Table 2. Results of Bank-Assisted Interventions to Improve Female Higher Education

REGION/PROJECT	INTERVENTIONS	RESULTS
EMANA Jordan First Education Project (1972)	Provision of a coeducational teacher training institute to train primary and preparatory teachers, 700 places. Provision of a two-year post secondary courses in institutional management and advanced commercial studies in the girls' comprehensive secondary school (CCS), 120 students.	Participation of women in the TTI has been greater than expected. In contrast to the equal proportion of male/female enrollments envisaged for the the TTI, which occurred in the first year of operation, the proportion of female trainees increased to about 66% in 1978. Opposition against co-educational teacher training among staff and the community were outweighed by the positive reactions of the students and the advantages in the flexibility and variety of the programs. The polytechnic financed by the project is also enrolling female students. In the girls' CCS, the two post-secondary vocational program (secretarial studies, and institutional food and nutrition management) were provided and follow the originally envisaged curricula. The objectives originally envisaged for specific multilateral programs have not been fully applied. Nonetheless, the present curricula allow flexibility and yet retain both academic and vocational programs.
Jordan Third Education Project (1979)	Provision of a community college, which would have programs to train special subject teachers and primary school teachers and technician. The college would enroll about 1000 students, of whom 600 are expected to be women.	In 1985/86 the college had about 880 students, the majority being women. Enrollment in the following year was expected to reach 1,300, exceeding the appraisal estimate by 30%. Thus, both enrollment and graduate output of the college is expected to exceed appraisal estimates. An existing agricultural teacher training institute was to be converted into a prevocational teacher training, increasing the student places from 60 to 256. However, soon after project appraisal, the institution became a community college as part of the Ministry of Education scheme to establish a community college to produce agricultural technicians in addition to preparing prevocational teachers. At project completion, the college enrolled 194 students, including 84 women, a change from the original plan to enroll only men.

Appendix Table 2..../cont

REGION/PROJECT	INTERVENTIONS	RESULTS
Morocco Fourth Education Project (1978)	Establishment/or expansion of five different post secondary education institution. All courses and options would be open to women. The institutions assisted under the project and targets are: 1) Regional Technical Teacher Training College. Significant female participation would be in the secretarial option. 2) Two two-year Higher Institutes of Technology; a target female enrollment of 20% of total enrollment has been set been set. However, this target is unlikely to be met in the first few years of operation because of the present low level participation in similar programs. Boarding facilities for 432 students in each institute would also be provided. 3) National Institute of Applied Engineering. A target female enrollment of 20% has been set, but it is also unlikely to be achieved in the first few years of operation. Boarding facilities for 768 students would be provided. 4) Expansion of Engineering College. The goal for female enrollment is 20% and on current trends this seems feasible; women comprised 13% of enrollment in 1977/78.	The five higher education institutions assisted under the project have the problems of underenrollment and overly generous space allocation. Although the completion report does not mention participation rate or women in these institutions the appraisal targets have been too high. The audit reported that most project institutions are still well below targets. Only third of the target enrollment figures were achieved. The project has contributed to a higher female participation rate by increasing the number of training places in specializations that are considered suitable for female students. The female participation rates in the project's higher education institutions were reported to be between 15 and 20%.
Morocco Fifth Education Project (1982)	Construction and equipping of four secondary teacher training institutes in science and mathematics. 3,840 students places (of which about one-third would be women).	These institutions are underenrolled because only 1870 students enrolled.

Appendix Table 2...../cont

REGION/PROJECT	INTERVENTIONS	RESULTS
Portugal Second Education Project (1979)	Establishment of two new home economics programs, reflecting an increasingly important role of women in agriculture. Recruit eight instructors for the home economics programs and provide scholarship for overseas training program of 4-18 months. Provision of the three Engineering Technician Training Institutes. The institutes would have a combined annual output of about 900 (20% women). Equip seven upgraded teacher training institutes. A combined enrollment would be about 2,220 (70% women).	Fellowship training were provided for the staff of home economics, among other staff. The enrollment of women in the technician training programs is increasing and has given better opportunities for training to women. The enrollment for Teacher Training Institutes is lower than specific objectives set at appraisal. About 700 students enrolled against an estimated 2,220, although it is possible that this would be improved slightly when the new buildings are completed.
Syria Second Education Project (1981)	Establishment of three Intermediate Agricultural Institutes and introduction of home economics and food technology programs. Thirty percent of total enrollment would be women, mainly in home economics (100%) and food technology (50%). Provision of two new Health Institutes (HTI). Total enrollments of the two HTIs would be increased from 300 to 600 (50% women). Provision of two new Health Technician Institutes (HTI). Total enrollments of the two HTIs would be increased from 300 to 600 (50% women).	Curricula for new specializations (including home economics) were prepared. Staff training (including home economics) was done. The PCR does not include the results of the other objectives regarding women's participation in higher education.

Appendix Table 2...../cont

REGION/PROJECT	INTERVENTIONS	RESULTS
SOUTH ASIA Bangladesh Second Agricultural Training Project (1983)	Improve home economics program of these schools which are for women students by providing 132 man-months of fellowship training for female teaching staff.	None of the fellowships, including fellowships for female instructors in home management, provided by the project were used, mainly due to: i) procedural delays in obtaining clearances from the National Training counci', which is responsible for approving all foreign training programs for government personnel; and ii) lack of serious efforts but the Government.
Pakistan Third Education Project (1977)	Establishment of 3 new female primary and secondary Teacher Training Institutes; expansion and reconstruction of 7 existing. A 50% expansion in female teacher training capacity is expected. A manpower study of the projected supply and demand for female primary teachers for the period 1977/78 and specific plans for overcoming any imbalance would be submitted to the IDA.	The expansion objective was ultimately achieved. However, project facilities had been consistently underutilized and underenrolled owing to three factors (1) an over-estimation of teacher demand; (2) adn underestimated of teacher supply; (3) an overly rigid application of the quota system which allowed no flexibility for filling seats left vacant by one region with able candidates from another. In 1984/85, enrollments in the female TTIs were 76% of appraisal capacity, compared with 93% of capacity in male TTIs. The female TTIs in the rural areas remained the most underenrolled. Maintenance and standards of buildings at TTIs fairly good. Management and supervision of project generally poor, e.g., women's TTI at D.I. Khan not built according to specification. Had not been visited by any supervision mission. An early draft of the study was submitted to the Coordinating Unit but was found unacceptable. A new report was prepared but the Audit could not find any reference to it being used.

Appendix Table 2..../cont

REGION/PROJECT	INTERVENTIONS	RESULTS
AFRICA Ethiopia Fourth Education Project (1975)	Increase women's participation in higher education by establishing a two-year home economics department. The proposed project department would offer courses in home economics, agriculture and extension education. Forty students would be trained as a technicians, and the training would focus on the development process by developing skills in family care, home management, home crafts and agricultural production.	The project supported the establishment of a Home Economics Department at the Ambo Institute of Agriculture which would intake 40 female students, and this was subsequently constructed. In addition, with the integrated approach to post-secondary education a further 20 female students have followed an agricultural teacher training course. The audit noted that one point which has not been given sufficient attention at Appraisal was the impossibility of adding a specialized (and also single sex oriented) subject to a general course. The solution to the problem, namely a split course between two institutions was in reality the only way out of such a situation. The transfer of this project item to the Commission for Higher Education also gave rise to difficulties regarding the take up of fellowships. Three fellowships had been foreseen in Home Economis and the Commission for Higher Education selected two female candidates and found places for them in July 1981. HOwever, due to the lack of funds at this late stafe of the project. the fellowships could not be awarded. The Bank failed to timely explain to the Borrower that fellowships could not be funded late in the Project due to the fact that funds had already been allocated.
The Gambia First Education Project (1978)	Construction of a training center for nurses, an extension to a school of nursing, and two hostels for nurses. Improve post-secondary schools in practical subject, including home economics; recruit male and female students for nursing training mainly from the rural areas.	The nursing school facilities were ready for operation in their new facilities for the beginning of the 1983-84 school year.

Appendix Table 2..../cont

REGION/PROJECT	INTERVENTIONS	RESULTS
Kenya Fourth Education Project (1978)	Expansion of the two agricultural institutes at Embu and Bukara which would offer two-year certificate courses in agriculture with a special home economics option for women. 25% of places would be reserved for women. In 1977/78 each institute had a capacity of 250 students, and the project would assist the Institute in expanding their enrollment up to 400. Construction of a new Animal Health Institue which would have a total capacity of 360 student places, of which 110 (30%) to be reserved for women. Provision of boarding facilities for all students in Agricultural Institutes and Animal Health Institute.	Each of agricultural Institues had its enrollment capacity of 250 expanded to 400, with about 25% reserved for women. In 1986 there were 6,000 applicants but only 210 were selected, indicating the continuing popularity of the program. New boarding facilities and special courses in home economics were provided. In 1984/85 the Embu Agricultural Institute expanded its enrollment from 250 to 400. Women represent one-third of the enrollment, which is an improvement of more than 5% over the target set at project appraisal. It is clear that the project has fully achieved the planned quantitative objectives. The Animal Health Institute started operating in 1984 with 200 first-year students and is planning to eventually enroll 400 students. About 40 women were enrolled (or 20% of the students population). This is below the original target. However, the authorities see it as a temporary situation due to imperfect advertising and registration procedures at the institute start-up.
Sudan Third Education Project, (1984)	Expansion of the Khartoum Polytechnic. Program Development of the two Teacher Training Institutes. The PCR envisaged that the project would allow a greater number of female students to become technicians in various specialties through its support to training facilities. Provision of two man-years of a specialist in educational programs for women in the two teacher training institutes.	In the PCR no reference is made to the impact of the project on women's access to higher education. Twelve man-months technical assistance were spent on women's education in the Ministry of Education.

Appendix Table 2..../cont

REGION/PROJECT	INTERVENTIONS	RESULTS
LAC The Bahamas Vocational and Technical Education Project (1981)	Increase enrollment for the Department of Nursing from 180 to 240 spaces. (Enrollment primarily female). Project will construct new Hotel Training College for 330FT/100PT students. A large percentage of women are in the hotel/restaurant business (65%); may increase female enrollment.	No specific figures available disaggregating female enrollment within noted institutions. A donation was made of renovated buildings for the BHTC thereby increasing anticipated capacity for outputs, resulting in an 80% increase in training opportunities. Regarding BSN, there was an actual reduction of training opportunities due to government decree. The government is planning on offering associate degrees at the College of Bahamas. The government plans on merging the two nursing programs to increase quality. No raw numbers are available regarding female enrollment.
Bolivia First Education and Vocational Training Project (1977)	Project will offer a four year, post-secondary course to train both basic and intermediate teachers at Warisata Teacher Training College. Current enrollment rate for women is 65%. (Highest percentage of female enrollments in higher education). Efforts will be made to increase the number of qualified females in the teacher training program. Fellowships will be provided to upgrade curriculum for women's education.	Warisata Teacher Training College enrolled 300 persons (as foreseen) with provision for student housing. According to the report, the new accommodations at WTTC made it possible to achieve planned enrollment. Increase in cost and financial difficulties occurred with WTTC, but the project was implemented despite complications showing the important weight placed on improving teacher training. Male/female ratios not mentioned, but it percentage given in SAR remains valid, can assume the increase in student places resulted in an increase in female enrollment.

Appendix Table 2..../cont

REGION/PROJECT	INTERVENTIONS	RESULTS
Jamaica Third Education Project (1981)	Within higher education, male and female enrollment rates are about equal. Planned expanion of technical teacher training and within vocational technical Institutes. College of ARts, Science and Technology: approximately 575 student places; Technical Teacher Training College: approximately 105 student places (expected 50% female enrollment rate).	Project met most of the physical targets; enrollments at CAST exceeded expectations by 200%. VTDI (instructor training) dropped due to unanticipated drop in demand for technical Instructors. HEART found to be on target (Hotel); EPAAs (Agriculture) aimed at producing 1,000 men and women annually; 3 years after implementation, enrollment at 31% capacity. Built for 600 students; 500 men (residential) and 100 women (non-residential). Low male enrollment rate due to uncertainty of employment in the agricultural sector, low career security and limited possibilities for advancement within agricutural sector. Noted within report: increasing residential options for women would most likely increase female enrollment. Currently 38% female enrollment rate; residence halls-16.6% for females. PAR assessed problem to be low male enrollment rate.
ASIA Indonesia First Teacher Training Project (1977)	Project will expand enrollment places for primary teacher training (grades 10-12) by 7000 (57% women).	Trained 6,100 teachers. PCR does not provide statistics regarding female enrollment rates. No gender-specific results provided, therefore it is difficult to determine the success or failure of the project.

Appendix Table 2..../cont

REGION/PROJECT	INTERVENTIONS	RESULTS
Papua New Guinea First Education Project (1976)	Increase student places in Madang Teachers College by 144 (2/3 women), finance student accommodations at Madang. Focus on increasing the number of female teachers. Highland Agricultural Training Institute will begin training females in agriculture through an extension program. Will increase these spaces from 60 to 200. Home economics will be taught through this program as well. The government will revise selection criteria for college entrance requirements to icnrease the number of females in non-traditional sectors. Also, will revise recruitment procedures for primary teacher training to encourage female representation in less develop areas. Groka Teachers College (secondary teacher training) expected to increase enrollment to 630 (30% women). In Allied Health Sciences goal is to increase enrollment from 120 to 165 (female enrollment rate expected to expand with overall enrollment increases).	Within agricuture sector (Highland Agricultural Institue) female enrollment rates fell 50% short of targets: 120 female enrollment (30% expected). Suggested reasons for not meeting target: 1) unqualified applicant pool; 2) small demand for women with agricultural training; 3) belief that farming is done mainly by women found to be unjustified. College of Allied Health Sciences anticipated an increase in the female enrollment rate to 30% (overall enrollment dropped from 120 to 117). Female enrollment remained constant (12-16%). Female enrollment at Madang (Primary Teacher Training College) also fell below target. Female enrollment actually fell between 1977 (42%) and 1982 (38%), well below project target of 50%. Reasons for not meeting targets: 1) appeal of other tertiary programs (competing with teachers colleges); 2) secondary school graduates chose direct employment; 3) small pool of qualified applicants; 4) social attitudes towards female enrollment at high levels of education prohibitive. Groka's Teacher Training College (secondary) also fell below expansion target (from 430 to 630 student places). The average enrollment rate was only 70% of capacity between 1980-82 (30% women). In recent years the college has been attracting a greater proportion of women than men. Reasons for underenrollment same as for primary teacher training.

Appendix Table 3: RECENT AND ONGOING BANK ASSISTED INTERVENTIONS TO IMPROVE FEMALE ACCESS TO HIGHER EDUCATION

Project/Country	Type	Establish campus/ expand places	Modify admissions criteria	Provide single sex schools	Curriculum Reform	Providing Scholarship/ other financial aid	Provide boarding facilities	Recruit women teachers	Evaluate needs of women	Community awareness campaign	Expand places in traditional fields	Provide programs for women in growing sectors	Provide counseling& Guidance	Monitor project results	Other Policies (Gov't policies)
AFRICA Djibouti Manpower and Education Development (1989)	Uni.					XX									
Ethiopia Fourth Education (1975)	Voc.										XX				
Ethiopia Sixth Education (1984)	T.T.	XX													
Ethiopia Seventh Education (1987)	Voc.						XX					XX			XX
Gambia Education (1990)	T.T.		XX								XX			XX	
Guinea Education Sector Adjustment (1990)	Univ.								XX						
Kenya Fourth Education (1978)	Tech.						XX				XX				
Kenya Fifth Education (1981)	Tech.					XX	XX					XX			
Kenya Universities Investment (1991)	Univ.													XX	
Kenya Education Sector Adjustment Program (1991)	Univ.													XX	
Malawi Second Education sector Credit (1989)	Univ.								XX		XX				
Mali Educ. Sector Consolidation (1989)	Univ.								XX					XX	
Niger Education (1981)	Tech.	XX					XX								

Project/Country	Type	Establish campus/ expand places	Modify admissions criteria	Provide single sex schools	Curriculum Reform	Providing Scholarship/ other financial aid	Provide boarding facilities	Recruit women teachers	Evaluate needs of women	Community awareness campaign	Expand places in traditional fields	Provide programs for women in growing sectors	Provide counseling& Guidance	Monitor project results	Other Policies (Gov't policies)
Sudan Third Education (1984)	Tech.	XX													
SOUTH ASIA Bangladesh 2nd Agricultural Training (1983)	Voc./ Tech.							XX							
India Education (1972)	Voc.										XX				
India Vocational Training (1989)	Voc.			XX				XX	XX	XX		XX			
India Technician Education (1990)	Tech.	XX		XX		XX	XX	XX	XX			XX			XX
India Second Technician Education (1991)	Tech.			XX		XX	XX					XX			
Nepal Agricultural Manpower Development (1984)	Tech.					XX	XX					XX			
Nepal Engineering Education (1989)	Univ.					XX	XX	XX				XX			
Pakistan Third Education (1977)	T.T.			XX					XX		XX				
EMENA Algeria Fourth Education (1978)	T.T./ Tech.	XX				XX	XX								
Jordan First Education (1972)	T.T./ Voc.										XX				
Jordan Third Education (1979)	T.T./ Tech.										XX				

Project/Country	Type	Establish campus/ expand places	Modify admissions criteria	Provide single sex schools	Curriculum Reform	Providing Scholarship/ other financial aid	Provide boarding facilities	Recruit women teachers	Evaluate needs of women	Community awareness campaign	Expand places in traditional fields	Provide programs for women in growing sectors	Provide counseling & Guidance	Monitor project results	Other Policies (Gov't policies)
Jordan Fourth Education (1981)	Voc./ Tech.	XX				XX	XX				XX			XX	
Jordan First Manpower Development (1985)	Voc.						XX				XX				XX
Morocco Fifth Education (1982)	T.T.										XX				
Morocco Fourth Education (1978)	T.T./ Tech.	XX					XX								
Oman Second Education (1984)	Univ.														XX
Oman Third Education (1987)	T.T.						XX				XX				XX
Portugal Education (1978)	T.T.										XX				
Portugal Second Education (1979)	Voc./ Tech.					XX		XX			XX	XX			
Syria Education (1977)	T.T.										XX				
Syria Second Education (1981)	Voc.										XX				XX
Tunisia Fifth Education (1982)	T.T./ Tech.										XX				
Tunisia Higher Education Restructuring (1992)	Univ.	XX										XX			
Turkey Second Industrial Training (1988)	Voc.	XX									XX				

Project/Country	Type	Establish campus/ expand places	Modify admissions criteria	Provide single sex schools	Curriculum Reform	Providing Scholarship/ other financial aid	Provide boarding facilities	Recruit women teachers	Evaluate needs of women	Community awareness campaign	Expand places in traditional fields	Provide programs for women in growing sectors	Provide counselling& Guidance	Monitor project results	Other Policies (Gov't policies)
Yemen Technical Training (1985)	Tech	XX													
Yemen Secondary Teacher Training (1991)	T.T.	XX				XX	XX		XX						XX
EAST ASIA China Second Agricultural Ed. (1984)	Voc.	XX													
China Education Development in Poor Provinces (1992)	Tech.								XX					XX	
China Key Studies Development (1991)	Tech.												XX	XX	
China Provincial Universities (1986)	Univ.													XX	
Indonesia Higher Ed. Dev. (1988)	Univ.													XX	
Indonesia Primary School Teacher Dev. (1992)	T.T.					XX			XX						
Indonesia Professional Human Resources Dev. (1989)	Voc.					XX			XX					XX	
Indonesia Science & Tech. Training (1985)	Tech.					XX									
Indonesia Second Univ. Dev. (1985)	Univ.													XX	
Indonesia Second Higher Educ. Dev. (1991)	Univ.													XX	

Project/Country	Type	Establish campus/ expand places	Modify admissions criteria	Provide single sex schools	Curriculum Reform	Providing Scholarship/ other financial aid	Provide boarding facilities	Recruit women teachers	Evaluate needs of women	Community awareness campaign	Expand places in traditional fields	Provide programs for women in growing sectors	Provide counselling& Guidance	Monitor project results	Other Policies (Gov't policies)
Korea Technology Advancement (1989)	Tech.									XX			XX		
Lae National Polytechnic Institute (1989)	Tech.	XX												XX	
Malaysia Univ. Development (1987)	Univ.								XX					XX	
Papua New Guinea First Educ. (1976)	Univ.	XX	XX			XX		XX			XX				
Papua New Guinea Public Sector Training (1990)	Tech.					XX			XX					XX	
Philippines Second Voc. Training (1992)	Voc.								XX					XX	
LAC Bahamas Voc.& Tech. Educ. (1981)	Voc./ Tech.										XX				
Barbados Second Educ.& Training (1986)	Voc./ Tech.	XX													
Bolivia Educ.& Voc. Training (1977)	T.T.				XX	XX		XX							
Eastern Caribbean Fourth Dev. Bank Regional Voc.& Tech. Ed. (1987)	Tech./ Voc.										XX	XX			
Ecuador Second Voc. Training (1982)	Voc.								XX					XX	
Haiti Fourth Educ. & Training (1985)	T.T.								XX						

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